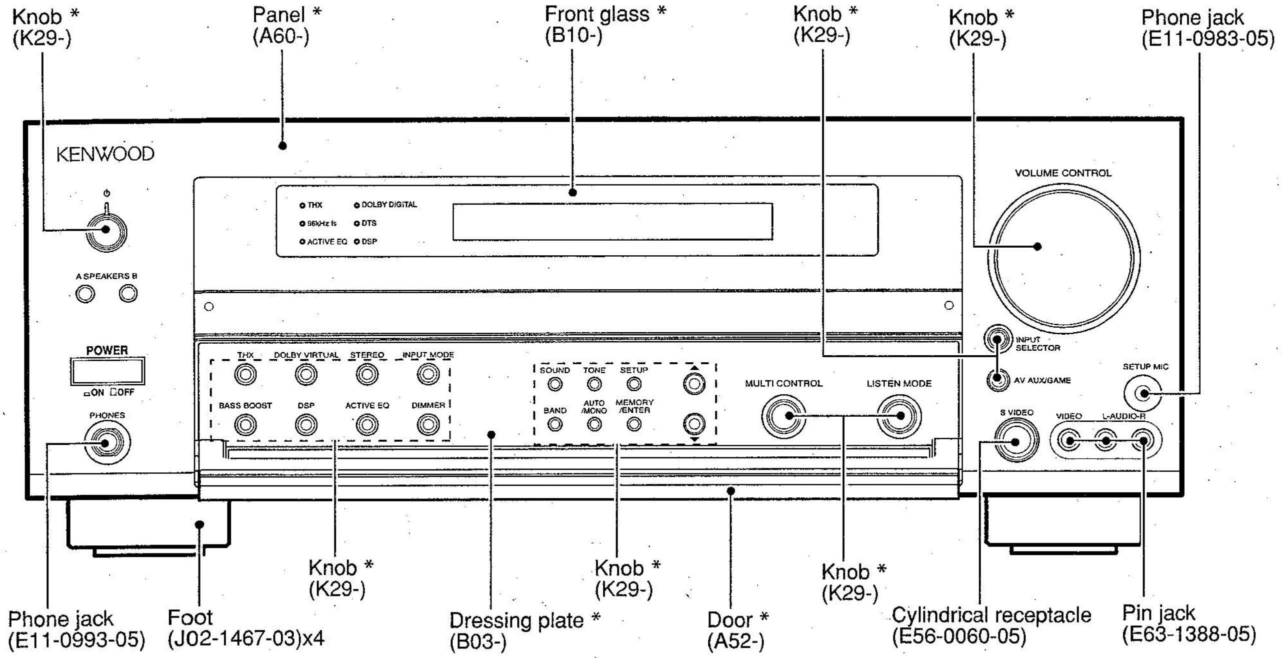
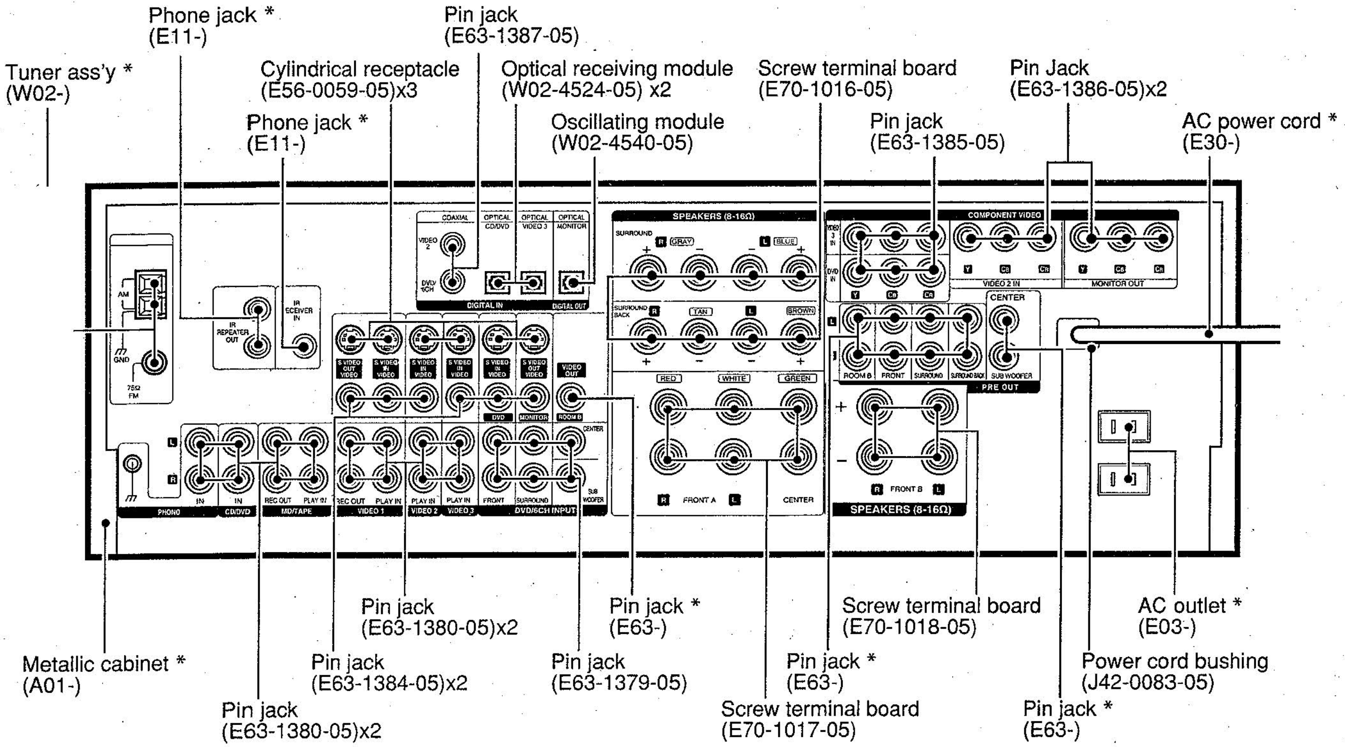
AUDIO VIDEO SURROUND RECEIVER

KRF-V8090D/V8090D-S/X9090D/X9090D-S
VR-9560/9560-S/9080/9080-S
SERVICE MANUAL

KENWOOD

© 2005-8 PRINTED IN KOREA
B51-5960-00 (K/K) 1455


Knob *
(K29-)
Panel *
(A60-)
Front glass *
(B10-)
Knob *
(K29-)
Knob *
(K29-)
Phone jack
(E11-0983-05)
KENWOOD
THX
DOLBY DIGITAL
96kHz fs
DTS
ACTIVE EQ
DSP
VOLUME CONTROL
A SPEAKERS B
POWER
ON OFF
PHONES
THX
DOLBY VIRTUAL
STEREO
INPUT MODE
BASS BOOST
DSP
ACTIVE EQ
DIMMER
SOUND
TONE
SETUP
BAND
AUTO /MONO
MEMORY /ENTER
MULTI CONTROL
LISTEN MODE
INPUT SELECTOR
AV AUX/GAME
SETUP MIC
S VIDEO
VIDEO
L-AUDIO-R
Knob *
(K29-)
Knob *
(K29-)
Knob *
(K29-)
Phone jack
(E11-0993-05)
Foot
(J02-1467-03)x4
Dressing plate *
(B03-)
Door *
(A52-)
Cylindrical receptacle
(E56-0060-05)
Pin jack
(E63-1388-05)


Phone jack *
(E11-)
Pin jack
(E63-1387-05)
Tuner ass'y *
(W02-)
Cylindrical receptacle
(E56-0059-05)x3
Optical receiving module
(W02-4524-05) x2
Screw terminal board
(E70-1016-05)
Pin Jack
(E63-1386-05)x2
Phone jack *
(E11-)
Oscillating module
(W02-4540-05)
Pin jack
(E63-1385-05)
AC power cord *
(E30-)
AM
GND
75Ω FM
IR REPEATER OUT
IR RECEIVER IN
COAXIAL
OPTICAL CD/DVD
OPTICAL VIDEO 3
OPTICAL MONITOR
DIGITAL IN
DIGITAL OUT
SPEAKERS (8-16Ω)
SURROUND
GRAY
BLUE
SURROUND BACK
TAN
BROWN
RED
WHITE
GREEN
FRONT A
CENTER
COMPONENT VIDEO
VIDEO 2 IN
MONITOR OUT
CENTER
ROOM B
FRONT
SURROUND
SURROUND BACK
SUB WOOFER
PRE OUT
FRONT B
SPEAKERS (8-16Ω)
PHONO
IN
CD/DVD
MD/TAPE
REC OUT
PLAY IN
VIDEO 1
VIDEO 2
VIDEO 3
DVD/6CH INPUT
S VIDEO OUT
S VIDEO IN
VIDEO OUT
DVD
MONITOR
ROOM B
SUB WOOFER
Pin jack
(E63-1380-05)x2
Pin jack *
(E63-)
Screw terminal board
(E70-1018-05)
AC outlet *
(E03-)
Metallic cabinet *
(A01-)
Pin jack
(E63-1384-05)x2
Pin jack
(E63-1379-05)
Pin jack *
(E63-)
Power cord bushing
(J42-0083-05)
Pin jack
(E63-1380-05)x2
Screw terminal board
(E70-1017-05)
Pin jack *
(E63-)

Illust. is VR-9080.
*** Refer to parts list on page 33.**

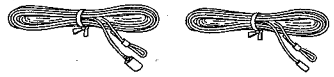
This product uses Lead Free solder.

KRF-V8090D/X9090D/VR-9560/9080

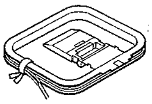
ACCESSORIES / CAUTIONS

ACCESSORIES

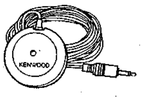
FM indoor antenna (1)


For VR-
(T90-0905-05)
For KRF-
(T90-0855-05)

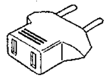
AM loop antenna (1)
(T90-0893-05)



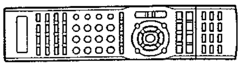
Microphone for SETUP (1)
(Cord length: approx. 5m (16 feet))
(T29-0011-05)



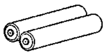
*AC plug adapter (1)
(E03-0508-05)



Remote control unit (1)
(See the right table)



Batteries (R03/AAA) (2)



*Use to adapt the plug on the power cord to the shape of the wall outlet. (Accessory only for regions where use is necessary.)

PCB vs MODEL

MODEL	*ABB.*	*PREAMP*	*AUDIO*	*SUB*	*DISPLAY*
KRF-V8090D	*E1*	X08-3392-72	X09-6962-72	X13-7962-72	X14-7902-72
KRF-V8090D-S	*E2*		X09-6962-72		
KRF-V8090D-S	*X2*	X08-3390-71	X09-6960-72		X14-7900-72
KRF-X9090D	*E3*	X08-3392-73	X09-6962-72	X13-7962-73	X14-7902-73
KRF-X9090D	*Y3*	X08-3392-91	X09-6960-72		X14-7902-91
KRF-X9090D-S	*E4*	X08-3392-73	X09-6962-72		X14-7902-73
KRF-X9090D-S	*X4*	X08-3390-13	X09-6960-72		X14-7900-73
KRF-X9090D-S	*Y4*	X08-3392-91			X14-7902-91
VR-9080	*K5,P5*	X08-3390-13	X09-6960-11	X13-7960-13	X14-7900-13
VR-9080-S	*K6,P6*				
VR-9560	*K7,P7*			X13-7960-14	X14-7980-10
VR-9560-S	*K8,P8*				

REMOTE CONTROL vs MODEL

MODEL	DESTINATION	PARTS #	CONTROLL #
KRF-V8090D	*E*	A70-1672-05	RC-R0829E
KRF-V8090D-S	*E*	A70-1672-05	RC-R0829E
KRF-V8090D-S	*X*	A70-1672-05	RC-R0829E
KRF-X9090D	*E*	A70-1676-05	RC-R0918E
KRF-X9090D	*Y*	A70-1675-05	RC-R0918
KRF-X9090D-S	*E*	A70-1676-05	RC-R0918E
KRF-X9090D-S	*X*	A70-1676-05	RC-R0918E
KRF-X9090D-S	*Y*	A70-1675-05	RC-R0918
VR-9080	*K,P*	A70-1675-05	RC-R0918
VR-9080-S	*K,P*	A70-1675-05	RC-R0918
VR-9560	*K,P*	A70-1671-05	RC-R0829
VR-9560-S	*K,P*	A70-1671-05	RC-R0829

DOLBY DIGITAL • EX PRO LOGIC IIx   DOLBY VIRTUAL SPEAKER   THX SELECT SURROUND EX   dts 96/24 ES NEO:6   6CH INPUT

CAUTIONS

Resetting the Microcomputer

The microcomputer may malfunction (unit cannot be operated, or shows an erroneous display) if the power cord is unplugged while the power is ON, or due to some other external factor. If this happens, execute the following procedure to reset the microcomputer and return the unit to its normal operating condition.

- Please note that resetting the microcomputer will clear the contents of the memory and returns the unit to the state it was in when it left the factory.

For the U.S.A. and Canada

Unplug the power cord from the wall outlet, then plug it back in while holding down the ⏻ (POWER ON/STANDBY) key.

For other countries

With the power cord plugged in, turn the POWER ON/OFF key OFF. Then, while holding down the ⏻ (POWER ON/STANDBY) key, press POWER ON/OFF key.

Memory back up function

Please note that the following items will be deleted from the unit's memory if the power cord is disconnected from the AC outlet for approximately 1 day.

- Power mode
- Input selector settings
- Speaker ON/OFF
- Volume level
- BASS, TREBLE, INPUT level
- TONE ON/OFF
- LOUDNESS ON/OFF
- Dimmer level
- Listen mode setting
- Speaker settings
- Input mode setting
- Sound mode settings
- Broadcast band
- Frequency setting
- Preset stations
- Tuning mode
- ACTIVE EQ mode
- GAME mode setting

ADJUSTMENT

No.	ITEM	INPUT SETTINGS	OUTPUT SETTINGS	RECEIVER SETTINGS	ALIGNMENT SETTINGS	ALIGNMENT POINTS	FIG.
AUDIO SECTION		SPEAKER : A					
<1>	IDLE CURRENT *	-	CN11, FL ch. CN10, FR ch. CN14, SL ch. CN13, SR ch. CN12, C ch. CN15, SBL ch. X09(A/4) CN706, SBR ch. X13(F/6)	(FRONT 2ch MODE) Volume: Minimum	VR1(FL) VR2(FR) VR3(SL) VR4(SR) VR5(CENTER) VR6(SBL) X09(A/4) VR702(SBR) X13(F/6)	Adjust every potentiometer 10 minutes later after turned the power on.	

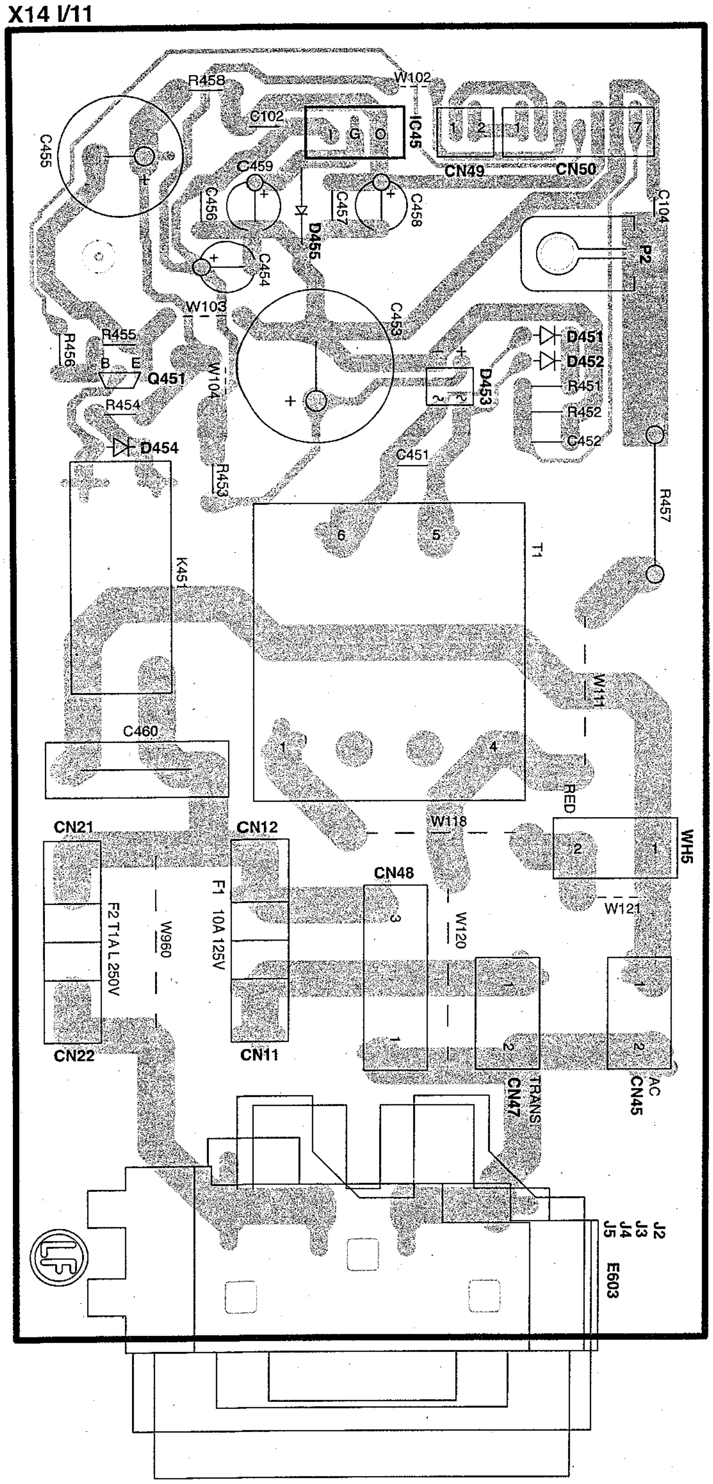
* Idling Current Adjustment

All power amplifier stage need idling current adjustment after the installation of TRAIT transistor.

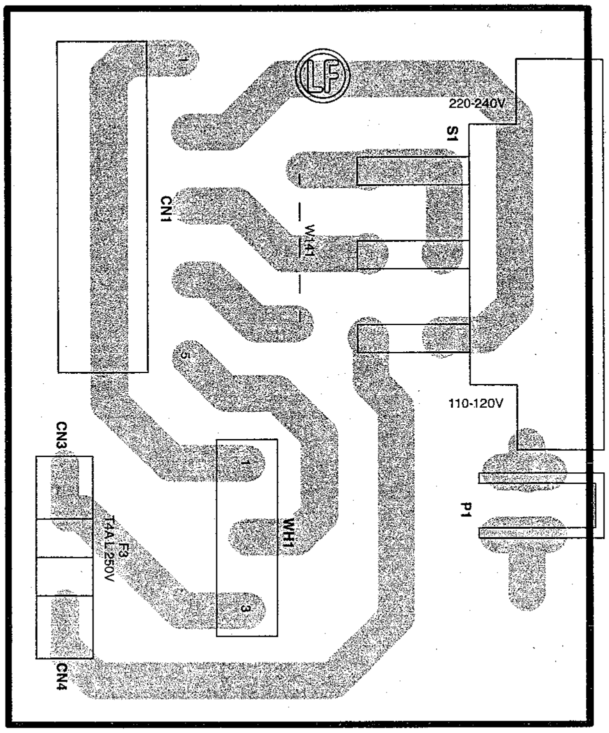
1. Connect a voltmeter to CNs with the correct polarity as indicated by the PCB silk print.
2. Adjust the preset, VRs to get 8.8mV (Idling current = 20mA) at the voltmeter reading.
3. Repeat step few times for all channels.

PC BOARD (Component side view)

X14 I/11

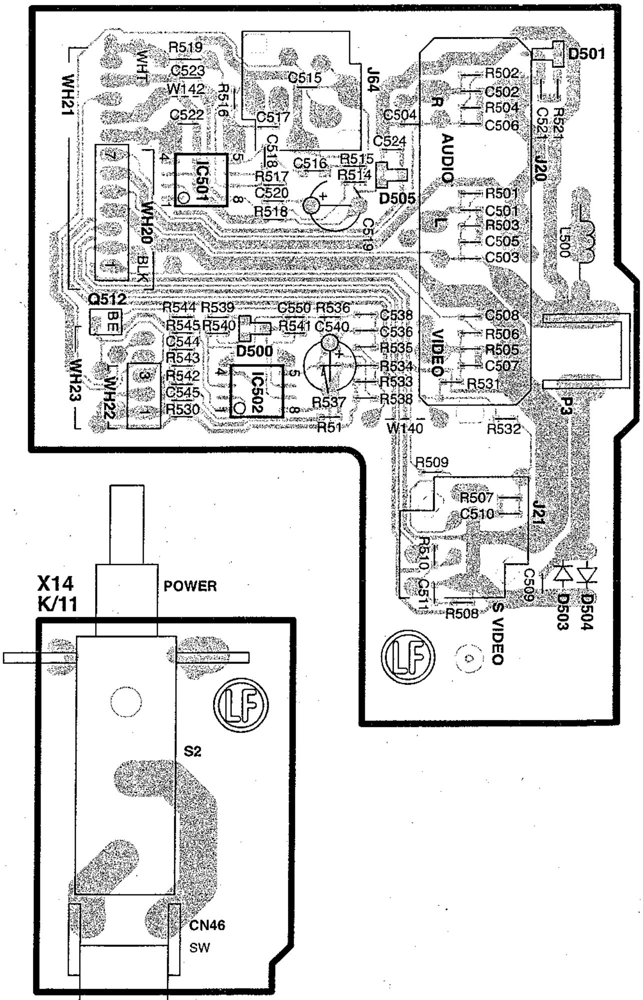

R458
W102
C102
IC45
G
O
1 2
CN49
CN50
7
C455
C459
C456
C457
C458
D455
C454
C104
P2
W103
C453
R455
R456
B E
Q451
W104
D451
D452
D453
R451
R452
C452
R454
D454
C451
R453
R457
K451
T1
6
5
C460
W111
1
4
RED
CN21
CN12
W118
WH5
CN48
W121
F2 T1A L 250V
W960
F1 10A 125V
3
W120
CN22
CN11
TRANS
CN47
AC
CN45
J2
J3
J4
J5
E603
LF

X14 J/11


LF
220-240V
S1
CN1
W141
110-120V
CN3
F3 T4A L 250V
WH1
P1
CN4

X14 H/11

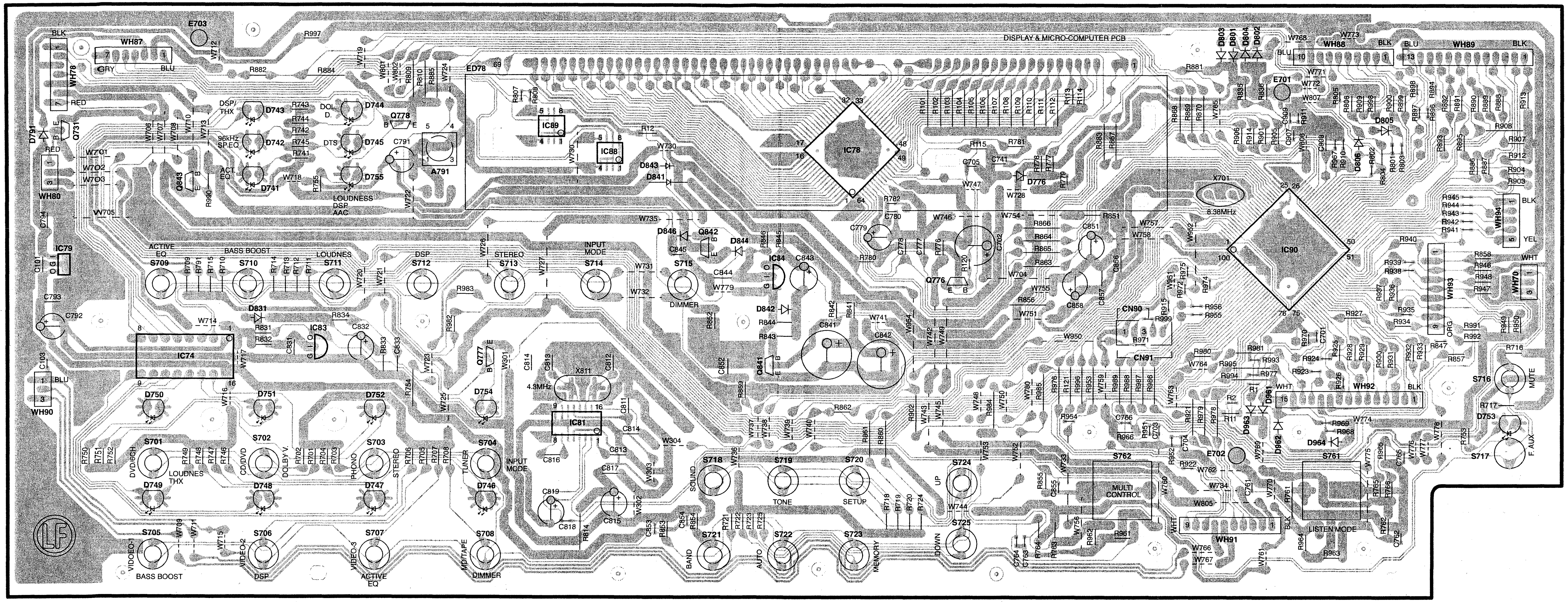
X14 K/11


WH21
WHT
R519
C523
W142
R516
C522
C515
J64
C504
C524
R502
C502
R504
C506
D501
R521
C521
AUDIO
R
J20
IC501
C516
R515
R514
R517
C518
C520
R518
D505
C519
R501
C501
R503
C505
C503
L500
L
WH20
BLK
Q512
BE
R544
R539
C550
R536
R545
R540
R541
C540
C538
C536
R535
R534
R533
R538
C508
R506
R505
C507
R531
VIDEO
P3
C544
R543
R542
C545
R530
D500
IC502
R537
WH22
WH23
R51
W140
R532
R509
R507
C510
J21
R510
C511
C509
D503
D504
R508
S VIDEO
LF
POWER
S2
CN46
SW

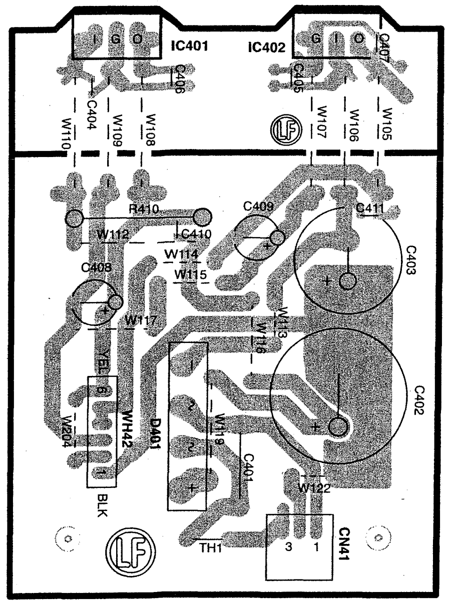
Refer to the schematic diagram for the value of resistors and capacitors.

PC BOARD

X14-7900-13 & X14-7980-10 A/11 (J75-0061-31)

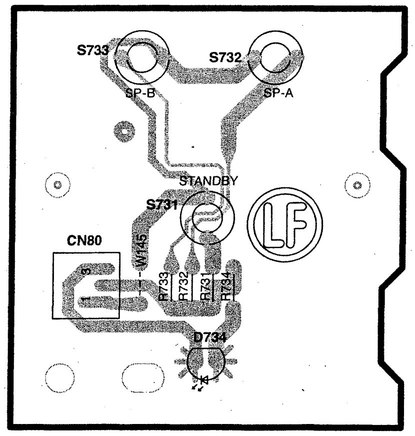

DISPLAY & MICRO-COMPUTER PCB
IC78
IC90
IC74
IC81
IC83
IC84
IC88
IC89
IC79
X701
8.38MHz
X811
4.5MHz
WH78
WH87
WH80
WH90
WH88
WH89
WH94
WH93
WH70
WH92
WH91
CN90
CN91
ED78
E703
E701
E702
A791
S701
S702
S703
S704
S705
S706
S707
S708
S709
S710
S711
S712
S713
S714
S715
S716
S717
S718
S719
S720
S721
S722
S723
S724
S725
S761
S762
ACTIVE EQ
BASS BOOST
LOUDNESS
DSP
STEREO
INPUT MODE
DIMMER
DVD/6CH
LOUDNES THX
CD/DVD
DOLBY V.
PHONO
STEREO
TUNER
VIDEO-1
VIDEO-2
VIDEO-3
MD/TAPE
SOUND
TONE
SETUP
BAND
AUTO
MEMORY
UP
DOWN
MULTI CONTROL
LISTEN MODE
MUTE
F. AUX
DSP/THX
96kHz SP.EQ
ACT EQ
DOL D.
DTS
LOUDNESS DSP AAC
BLK
GRY
BLU
RED
WHT
YEL
ORG

X14 E/11

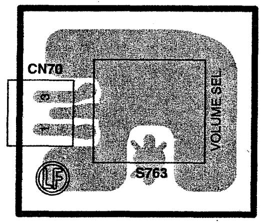

IC401
IC402
C403
C402
C409
C410
C411
C408
C401
R410
D401
WH42
YEL
BLK
TH1
CN41

X14 D/11

X14 C/11


S733
S732
SP-B
SP-A
STANDBY
S731
CN80
D734

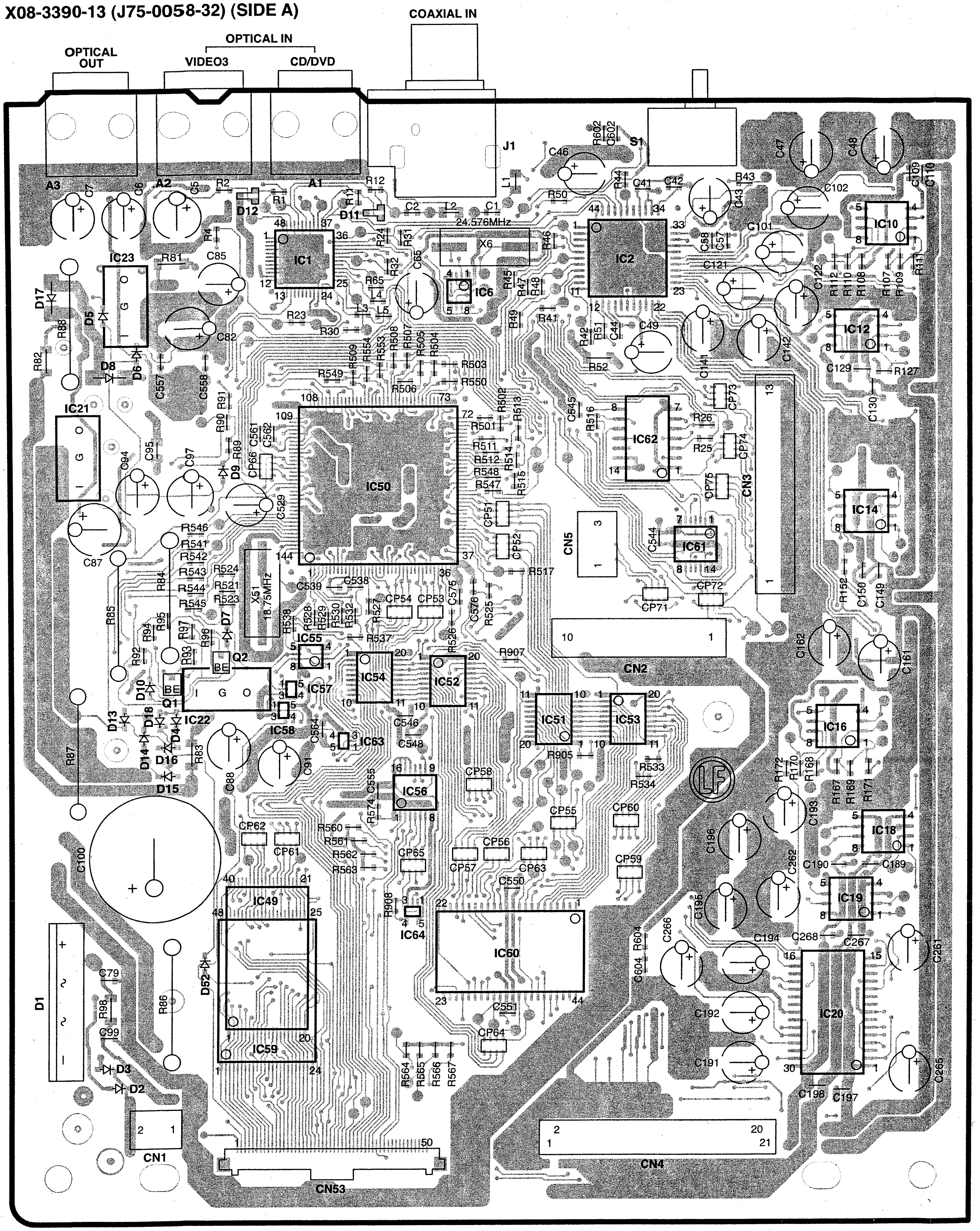
X14 B/11


CN70
VOLUME SEL
S763

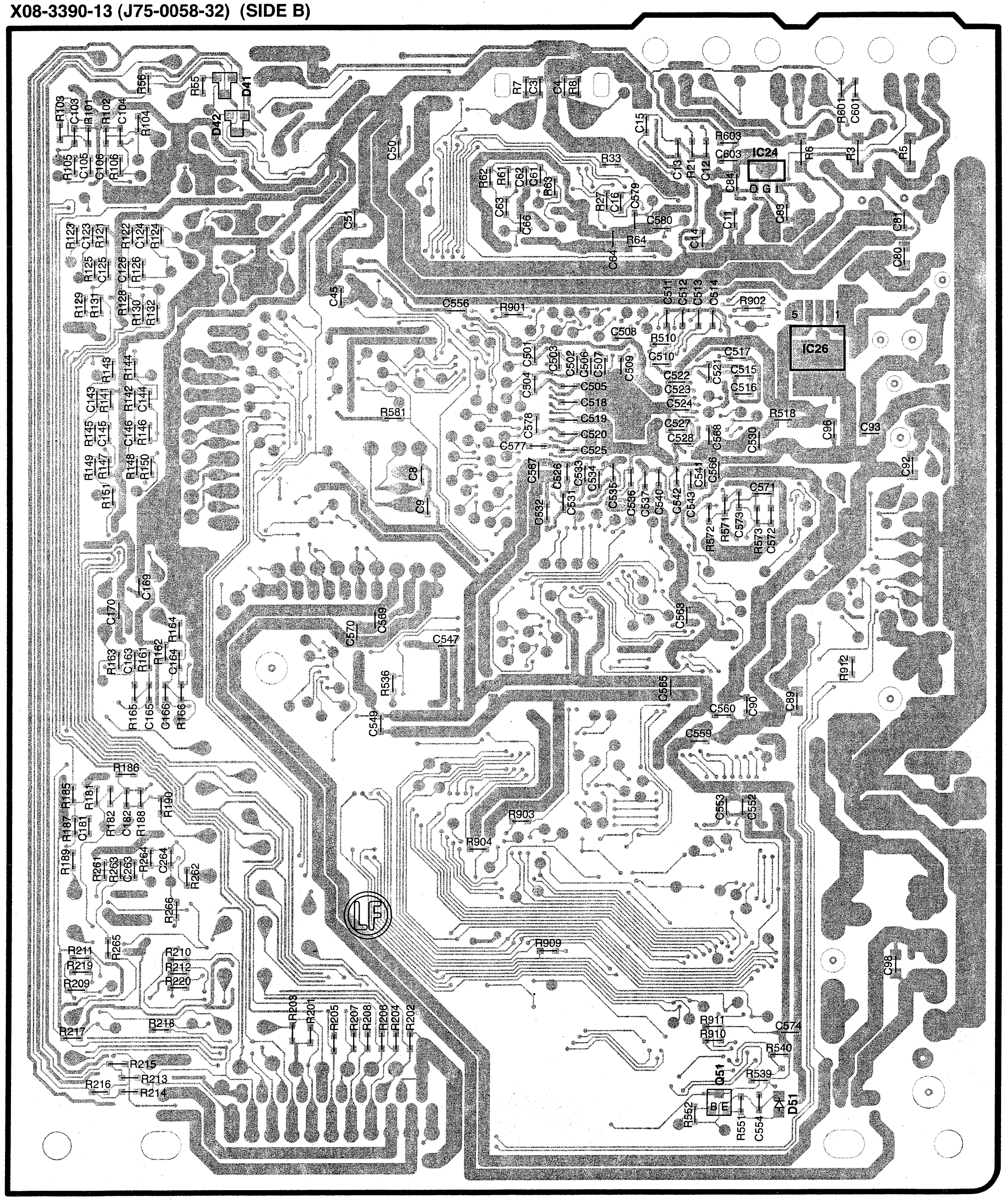
Refer to the schematic diagram for the value of resistors and capacitors.

PC BOARD

X08-3390-13 (J75-0058-32) (SIDE A)

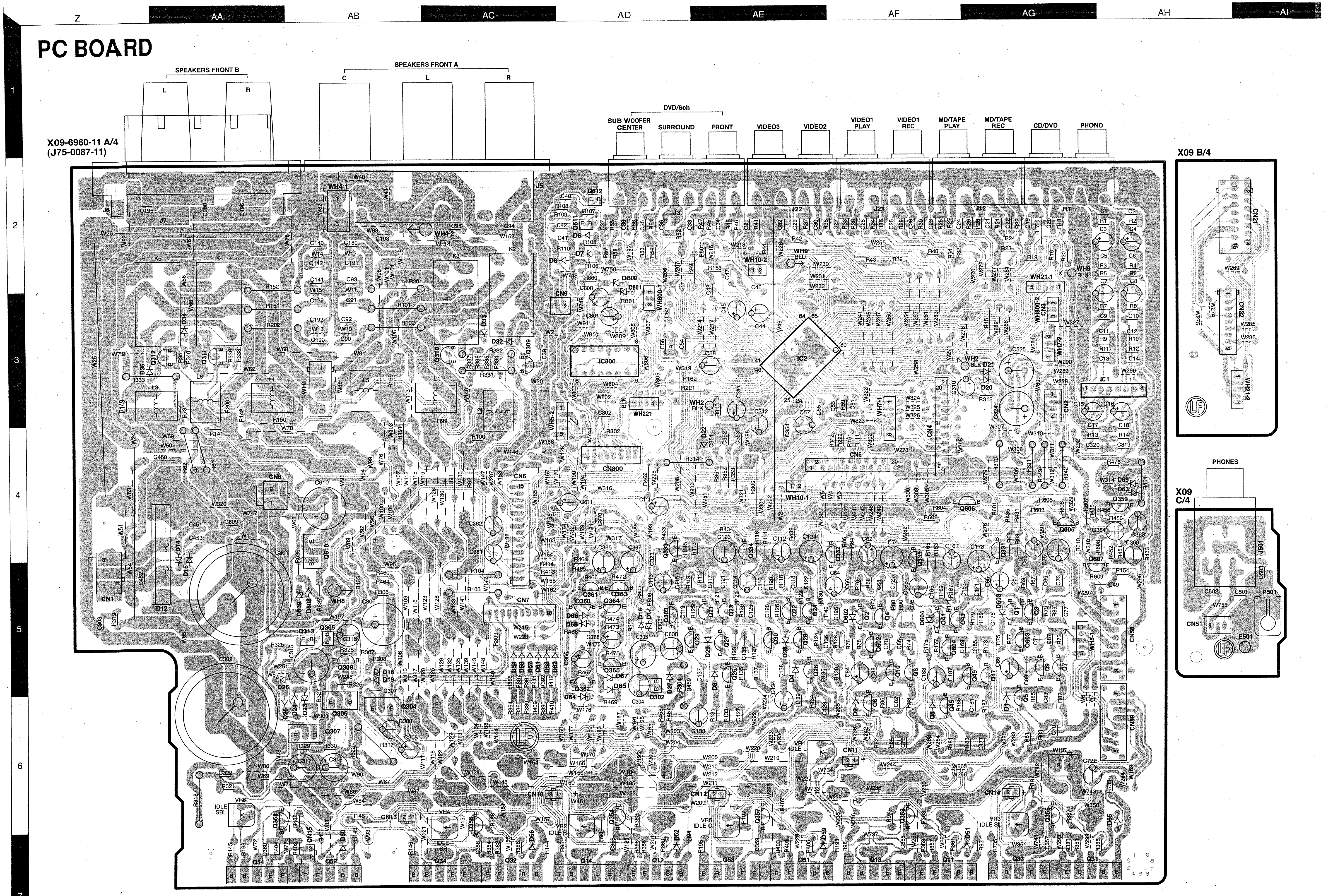

OPTICAL OUT
OPTICAL IN
VIDEO3
CD/DVD
COAXIAL IN
J1
S1
A3
A2
A1
IC1
IC2
IC6
IC10
IC12
IC14
IC16
IC18
IC19
IC20
IC21
IC22
IC23
IC49
IC50
IC51
IC52
IC53
IC54
IC55
IC56
IC57
IC58
IC59
IC60
IC61
IC62
IC63
IC64
X6
24.576MHz
X51
18.75MHz
CN1
CN2
CN3
CN4
CN5
CN53
D1
Q1
Q2
C100
LF

X08-3390-13 (J75-0058-32) (SIDE B)


IC24
IC26
D41
D42
D51
Q51
LF

Refer to the schematic diagram for the value of resistors and capacitors.

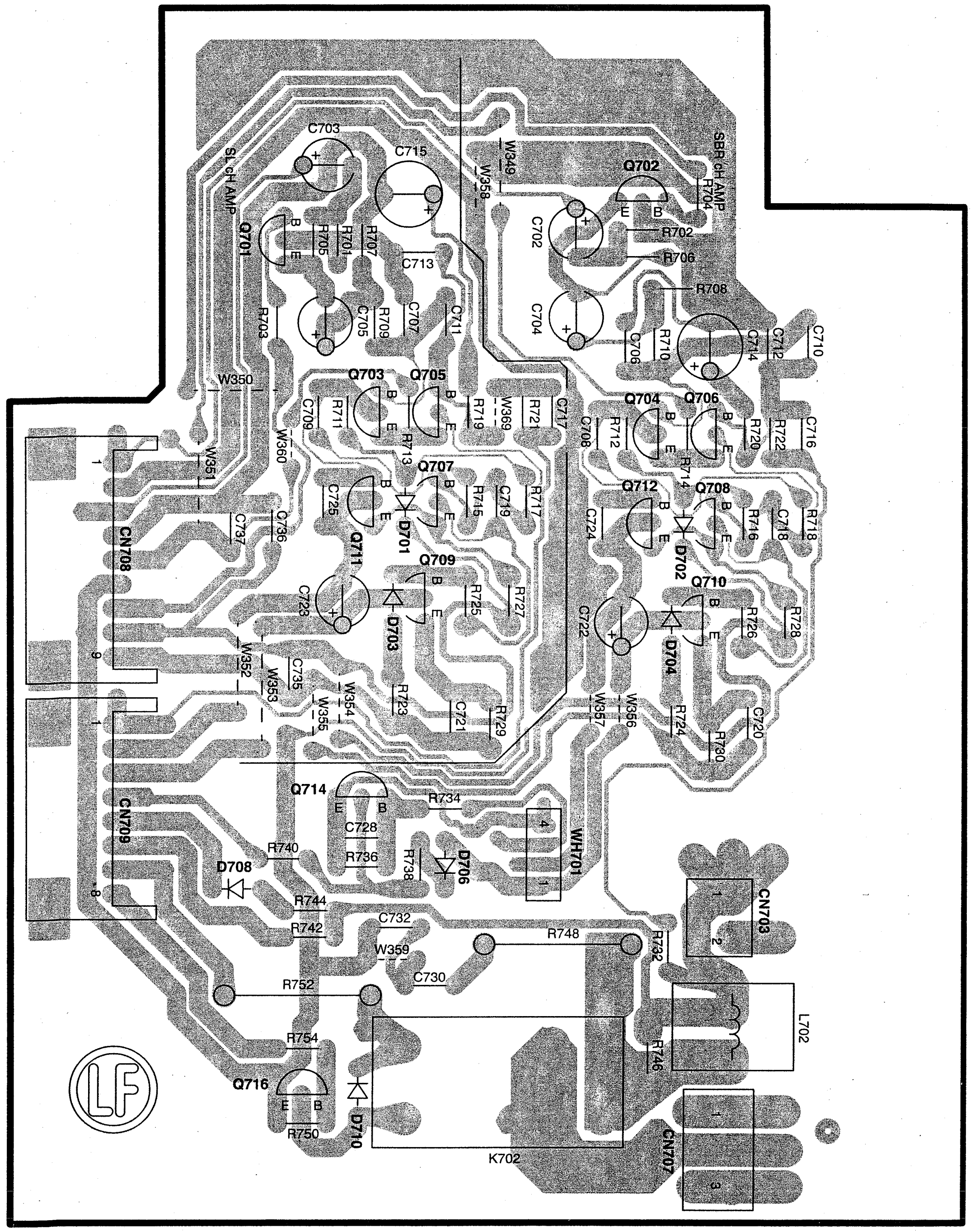
PC BOARD


Z
AA
AB
AC
AD
AE
AF
AG
AH
AI
1
2
3
4
5
6
7
SPEAKERS FRONT B
L
R
SPEAKERS FRONT A
C
L
R
X09-6960-11 A/4
(J75-0087-11)
DVD/6ch
SUB WOOFER CENTER
SURROUND
FRONT
VIDEO3
VIDEO2
VIDEO1 PLAY
VIDEO1 REC
MD/TAPE PLAY
MD/TAPE REC
CD/DVD
PHONO
X09 B/4
CN21
CN22
WH21-2
PHONES
X09 C/4
J501
CN51
E501
P501
IC1
IC2
IC800
CN800
CN1
CN4
CN5
CN6
CN7
CN8
CN9
CN10
CN11
CN12
CN13
CN14
CN15
CN58
CN59
J3
J5
J6
J7
J11
J12
J21
J22
K2
K3
K4
K5
WH1
WH2
WH4-1
WH4-2
WH5-1
WH5-2
WH6
WH8
WH9
WH10-1
WH10-2
WH21-1
WH221
WH800-1
WH800-2
VR1 IDLE L
VR2 IDLE R
VR3 IDLE SL
VR4 IDLE SR
VR5 IDLE C
VR6 IDLE SBL
Q54
Q52
Q34
Q32
Q14
Q12
Q53
Q51
Q13
Q11
Q33
Q31

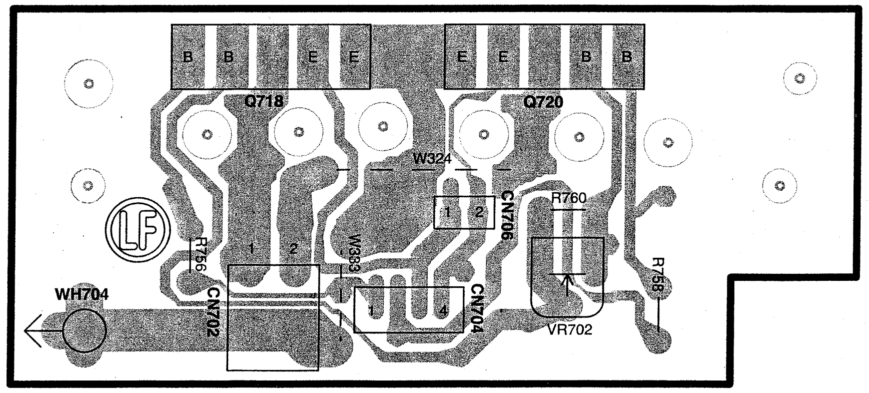
Refer to the schematic diagram for the value of resistors and capacitors.

PC BOARD

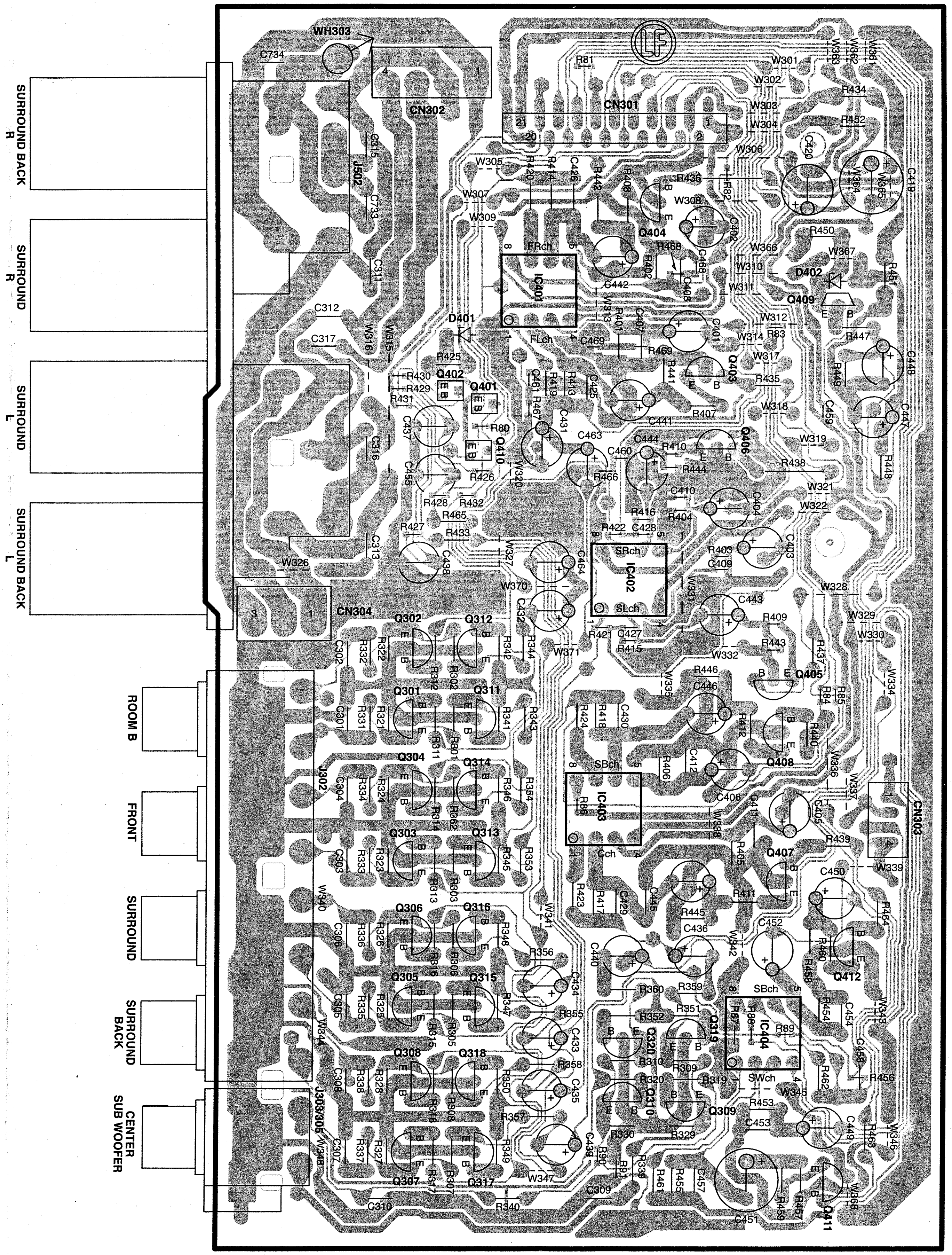
X13 E/6


SLch AMP
SBR ch AMP
Q701
Q702
Q703
Q704
Q705
Q706
Q707
Q708
Q709
Q710
Q711
Q712
Q714
Q716
D701
D702
D703
D704
D706
D708
D710
C703
C715
C713
C702
C704
CN708
CN709
CN703
CN707
WH701
L702
K702
R748
R752
R754
R750
W350
W351
W359

X13 F/6


Q718
Q720
B
E
W324
CN706
CN702
CN704
R760
R756
R758
W333
WH704
VR702

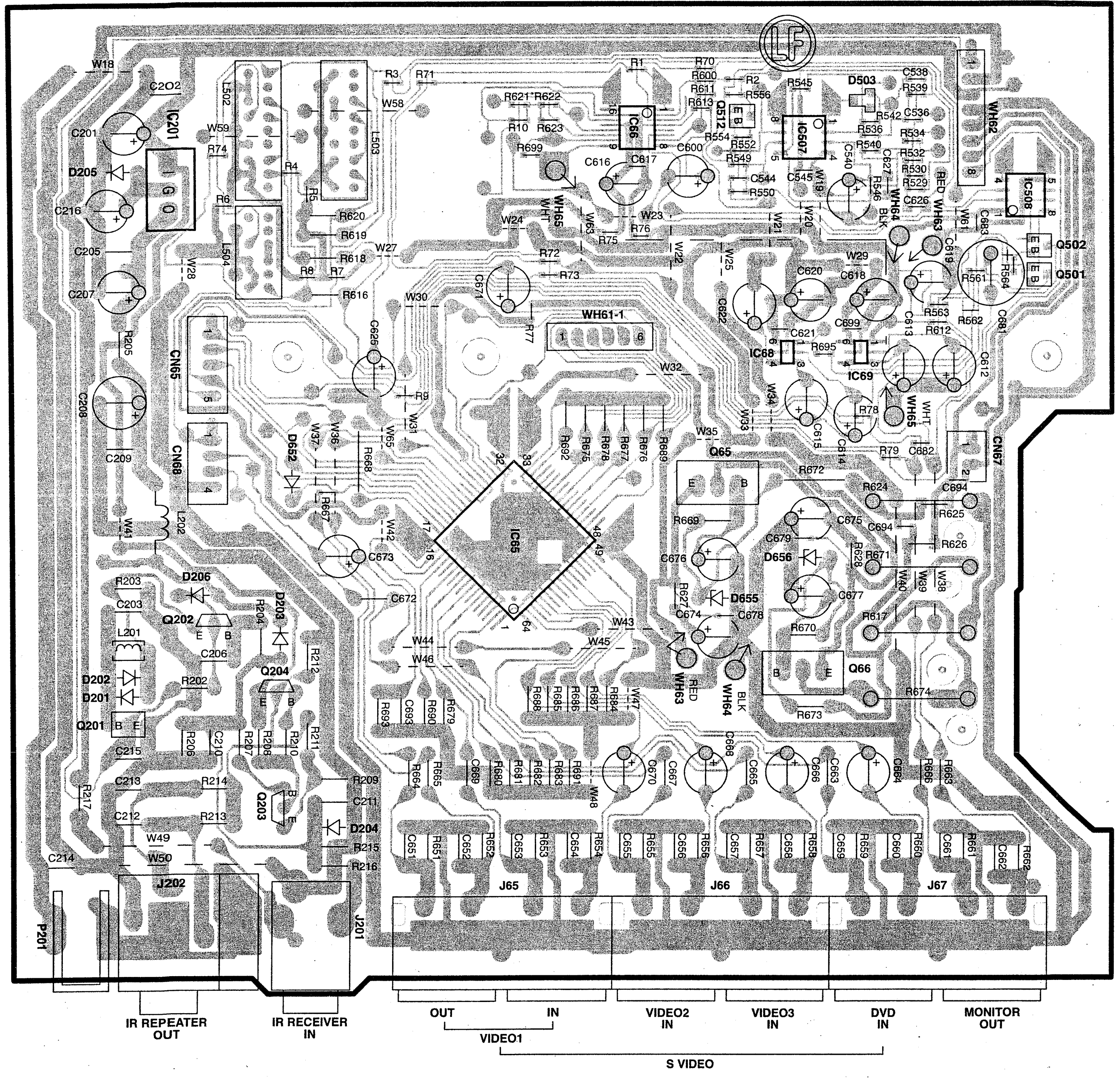
X13 D/6


SURROUND BACK R
SURROUND R
SURROUND L
SURROUND BACK L
ROOM B
FRONT
SURROUND
SURROUND BACK
CENTER SUB WOOFER
WH303
C734
CN302
CN301
J502
CN304
J302
J303/305
CN303
IC401
IC402
IC403
IC404
FRch
FLch
SRch
SLch
SBch
Cch
SWch
Q301
Q302
Q303
Q304
Q305
Q306
Q307
Q308
Q309
Q310
Q311
Q312
Q313
Q314
Q315
Q316
Q317
Q318
Q319
Q320
Q401
Q402
Q403
Q404
Q405
Q406
Q407
Q408
Q409
Q410
Q411
Q412
D401
D402

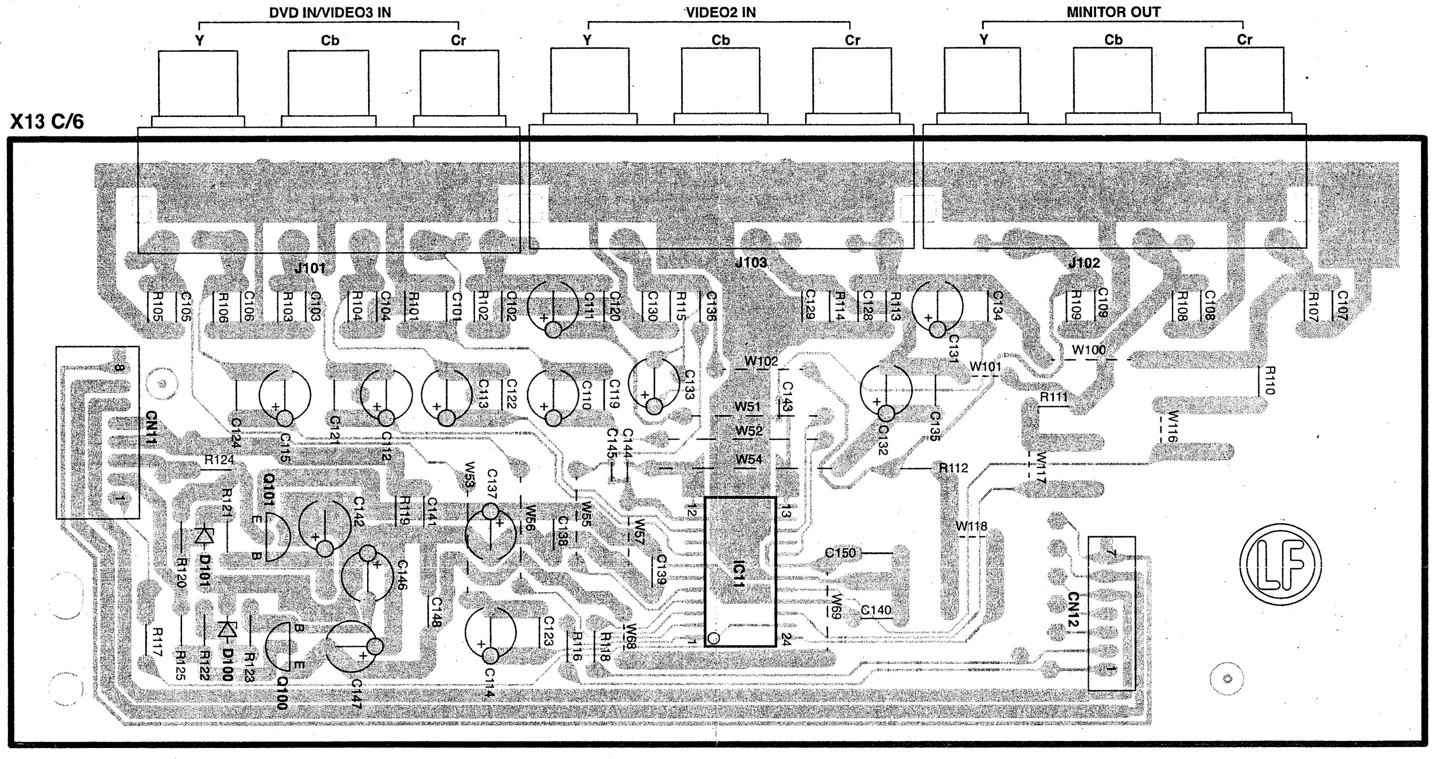
Refer to the schematic diagram for the value of resistors and capacitors.

PC BOARD

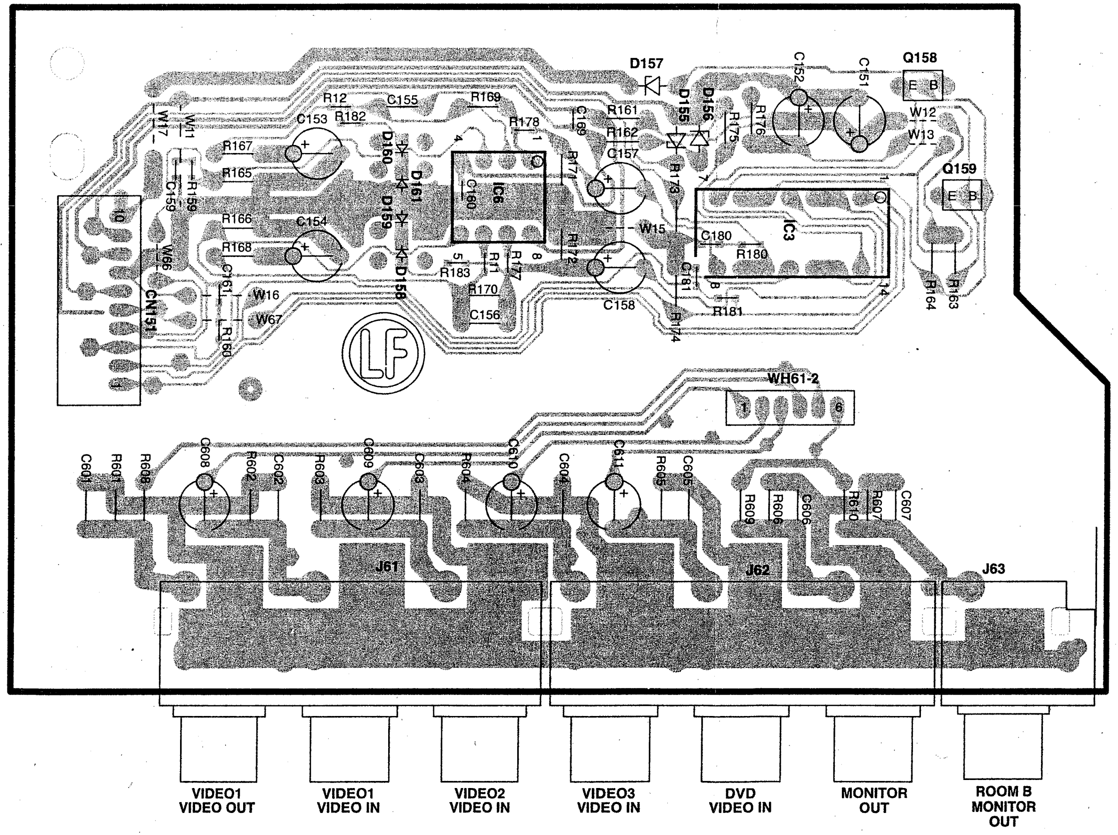
X13-7960-13 A/6 (J75-0082-11)


IC65
IC201
CN65
CN68
CN67
J65
J66
J67
J202
J201
P201
IR REPEATER OUT
IR RECEIVER IN
OUT
IN
VIDEO1
VIDEO2 IN
VIDEO3 IN
DVD IN
MONITOR OUT
S VIDEO

X13 C/6


DVD IN/VIDEO3 IN
VIDEO2 IN
MONITOR OUT
Y
Cb
Cr
J101
J103
J102
CN11
CN12
IC11

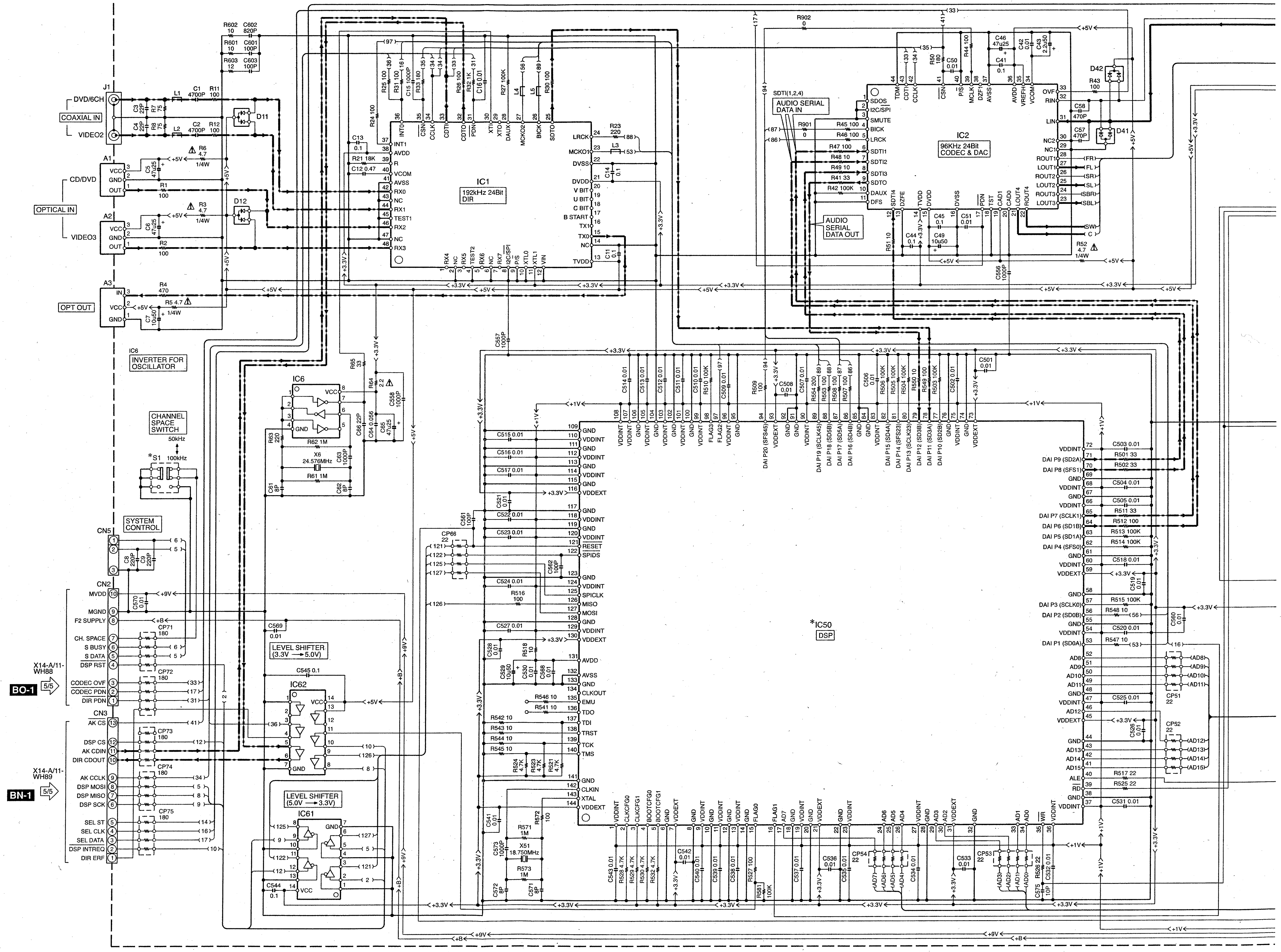
X13 B/6

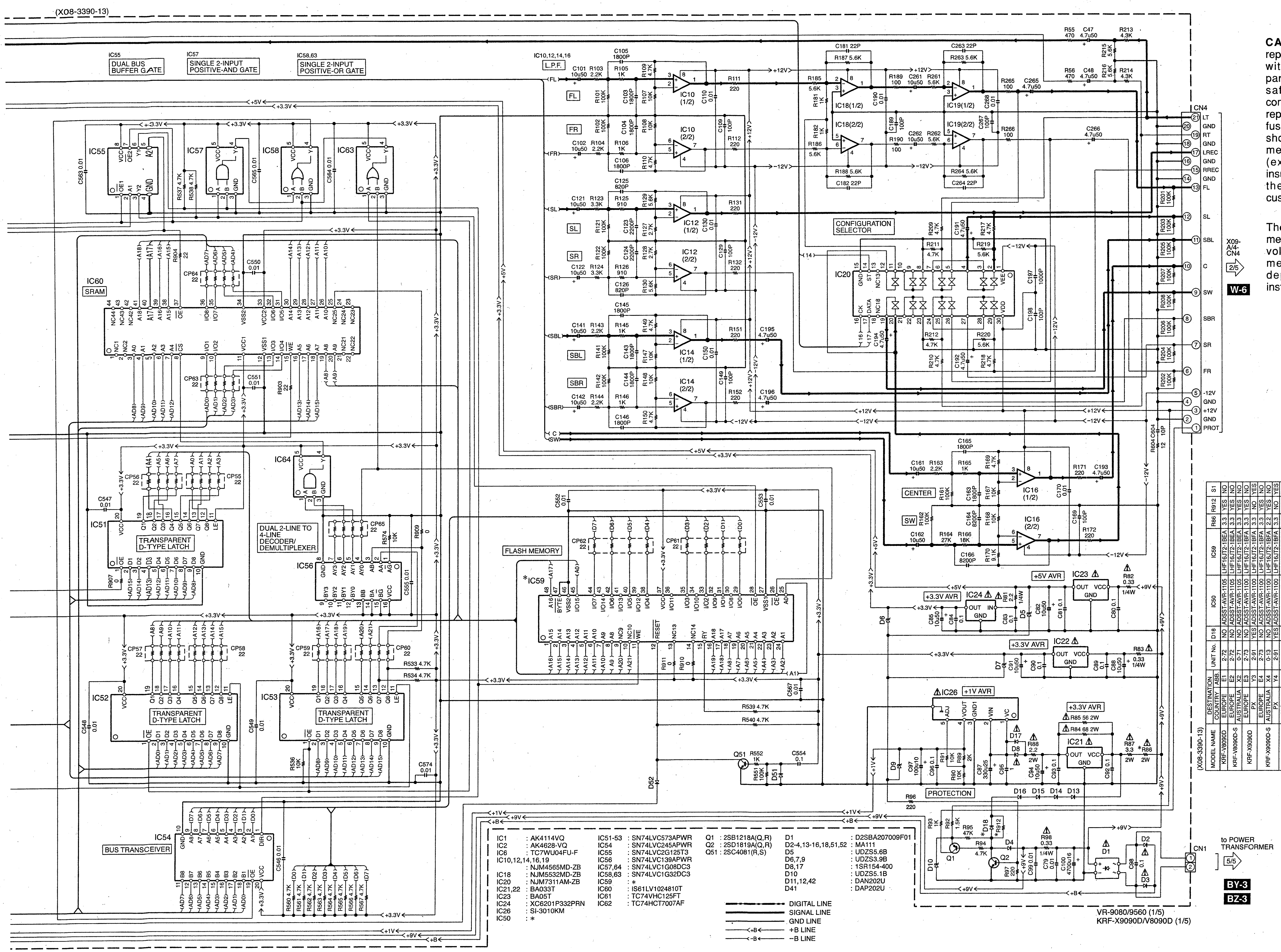

IC6
IC3
CN151
WH61-2
J61
J62
J63
VIDEO1 VIDEO OUT
VIDEO1 VIDEO IN
VIDEO2 VIDEO IN
VIDEO3 VIDEO IN
DVD VIDEO IN
MONITOR OUT
ROOM B MONITOR OUT

Refer to the schematic diagram for the value of resistors and capacitors.

KRF-V8090D/X9090D/VR-9560/9080

(X08-3390-13)


J1
DVD/6CH
COAXIAL IN
VIDEO2
A1
CD/DVD
OPTICAL IN
A2
VIDEO3
A3
OPT OUT
D11
D12
IC1
192kHz 24Bit DIR
IC2
96KHz 24Bit CODEC & DAC
AUDIO SERIAL DATA IN
AUDIO SERIAL DATA OUT
SDTI(1,2,4)
D41
D42
IC6
INVERTER FOR OSCILLATOR
X6 24.576MHz
CHANNEL SPACE SWITCH
50kHz
*S1 100kHz
SYSTEM CONTROL
CN5
CN2
MVDD
MGND
F2 SUPPLY
CH. SPACE
S BUSY
S DATA
DSP RST
CODEC OVF
CODEC PDN
DIR PDN
X14-A/11-WH88
BO-1
5/5
CN3
AK CS
DSP CS
AK CDIN
DIR CDOUT
AK CCLK
DSP MOSI
DSP MISO
DSP SCK
SEL ST
SEL CLK
SEL DATA
DSP INTREQ
DIR ERF
X14-A/11-WH89
BN-1
5/5
IC62
LEVEL SHIFTER (3.3V → 5.0V)
IC61
LEVEL SHIFTER (5.0V → 3.3V)
*IC50
DSP
X51 18.750MHz
CP66
CP71
CP72
CP73
CP74
CP75
CP51
CP52
CP53
CP54
RESET
SPIDS
SPICLK
MISO
MOSI
AVDD
AVSS
CLKOUT
EMU
TDO
TDI
TRST
TCK
TMS
CLKIN
XTAL
VDDEXT
VDDINT
GND
DAI P1 (SD0A)
DAI P2 (SD0B)
DAI P3 (SCLK0)
DAI P4 (SFS0)
DAI P5 (SD1A)
DAI P6 (SD1B)
DAI P7 (SCLK1)
DAI P8 (SFS1)
DAI P9 (SD2A)
DAI P10 (SD2B)
DAI P11 (SD3A)
DAI P12 (SD3B)
DAI P13 (SCLK23)
DAI P14 (SFS23)
DAI P15 (SD4A)
DAI P16 (SD4B)
DAI P17 (SD5A)
DAI P18 (SD5B)
DAI P19 (SCLK45)
DAI P20 (SFS45)
FLAG0
FLAG1
FLAG2
FLAG3
ALE
RD
WR
+5V
+3.3V
+1V
+9V
+8


(X08-3390-13)
IC55 DUAL BUS BUFFER GATE
IC57 SINGLE 2-INPUT POSITIVE-AND GATE
IC58,63 SINGLE 2-INPUT POSITIVE-OR GATE
IC10,12,14,16 L.P.F.
IC60 SRAM
IC51 TRANSPARENT D-TYPE LATCH
IC52 TRANSPARENT D-TYPE LATCH
IC53 TRANSPARENT D-TYPE LATCH
IC56 DUAL 2-LINE TO 4-LINE DECODER/DEMULTIPLEXER
IC64
*IC59 FLASH MEMORY
IC54 BUS TRANSCEIVER
IC18(1/2)
IC18(2/2)
IC19(1/2)
IC19(2/2)
IC20 CONFIGURATION SELECTOR
IC10 (1/2)
IC10 (2/2)
IC12 (1/2)
IC12 (2/2)
IC14 (1/2)
IC14 (2/2)
IC16 (1/2)
IC16 (2/2)
FL FR SL SR SBL SBR CENTER SW
+5V AVR IC23
+3.3V AVR IC24
+3.3V AVR IC22
IC26 +1V AVR
+3.3V AVR IC21
PROTECTION
CN4
21 LT
20 GND
19 RT
18 GND
17 LREC
16 GND
15 RREC
14 GND
13 FL
12 SL
11 SBL
10 C
9 SW
8 SBR
7 SR
6 FR
5 -12V
4 GND
3 +12V
2 GND
1 PROT
X09-A/4-CN4
2/5
W-6
CN1
to POWER TRANSFORMER
5/5
BY-3
BZ-3
VR-9080/9560 (1/5)
KRF-X9090D/V8090D (1/5)

IC1 : AK4114VQ
IC2 : AK4628-VQ
IC6 : TC7WU04FU-F
IC10,12,14,16,19 : NJM4565MD-ZB
IC18 : NJM5532MD-ZB
IC20 : NJM7311AM-ZB
IC21,22 : BA033T
IC23 : BA05T
IC24 : XC6201P332PRN
IC26 : SI-3010KM
IC50 : *
IC51-53 : SN74LVC573APWR
IC54 : SN74LVC245APWR
IC55 : SN74LVC2G125T3
IC56 : SN74LVC139APWR
IC57,64 : SN74LVC1G08DC3
IC58,63 : SN74LVC1G32DC3
IC59 : *
IC60 : IS61LV1024810T
IC61 : TC74VHC125FT
IC62 : TC74HCT7007AF
Q1 : 2SB1218A(Q,R)
Q2 : 2SD1819A(Q,R)
Q51 : 2SC4081(R,S)
D1 : D2SBA207009F01
D2-4,13-16,18,51,52 : MA111
D5 : UDZS5.6B
D6,7,9 : UDZS3.9B
D8,17 : 1SR154-400
D10 : UDZS5.1B
D11,12,42 : DAN202U
D41 : DAP202U

━ ━ ━	DIGITAL LINE
━━━━	SIGNAL LINE
────	GND LINE
─<+B←─	+B LINE
─<-B←─	−B LINE

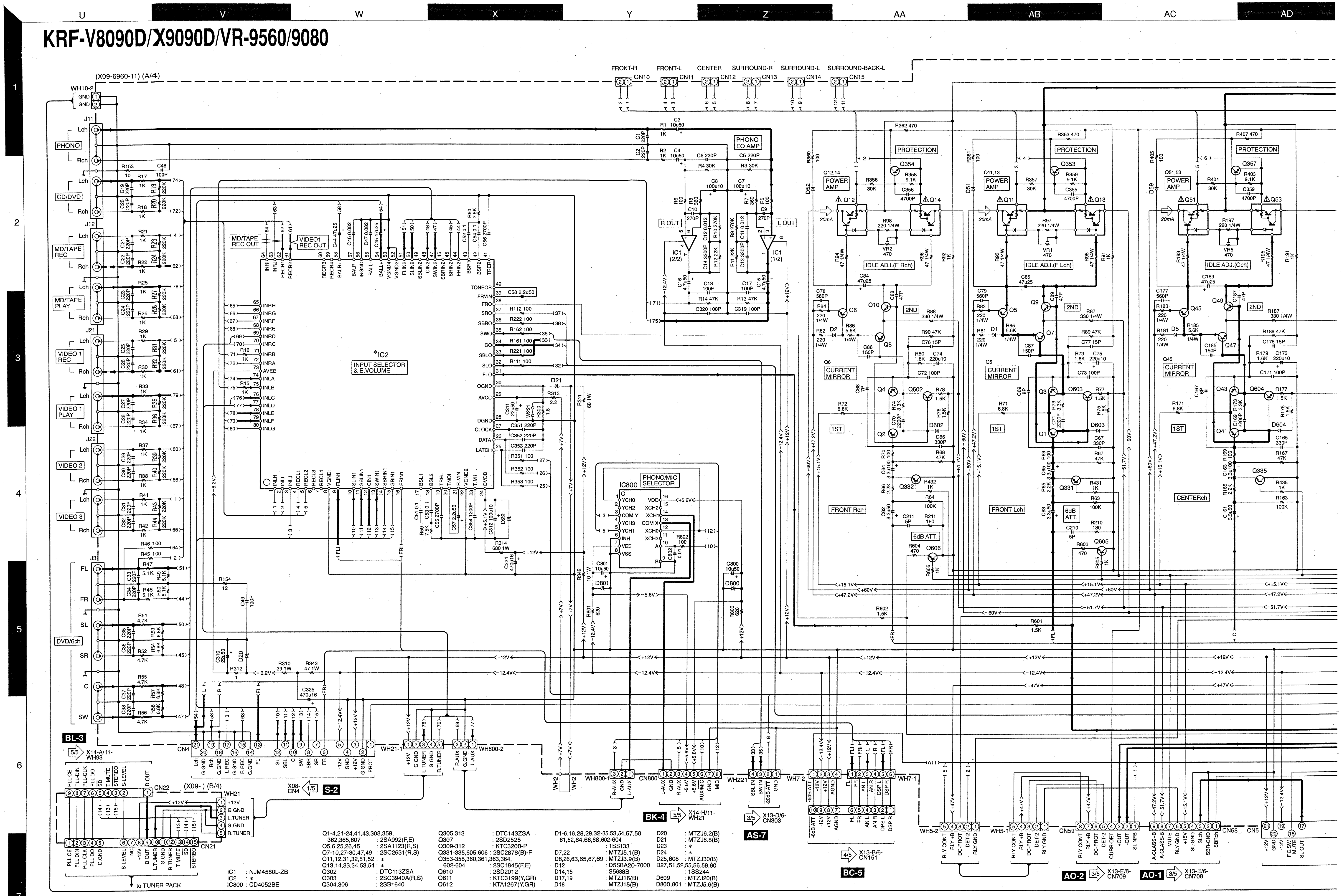
CAUTION: For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list). ⚠ indicates safety critical components. For continued protection against risk of fire, replace only with same type and rating fuse(s). To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.

The DC voltage is an actual reading measured with a high impedance type voltmeter with no signal input. The measurement value may vary depending on the measuring instruments used or on the product.

(X08-3390-13)

MODEL NAME	DESTINATION		UNIT No.	D18	IC50	IC59	R86	R912	S1
	COUNTRY	ABB.							
KRF-V8090D	EUROPE	E1	2-72	NO	ADSST-AVR-1105	LHF16JT2-1BEA	3.3	YES	NO
KRF-V8090D-S	EUROPE	E2	2-72	NO	ADSST-AVR-1105	LHF16JT2-1BEA	3.3	YES	NO
	AUSTRALIA	X2	0-71	NO	ADSST-AVR-1105	LHF16JT2-1BEA	3.3	YES	NO
KRF-X9090D	EUROPE	E3	2-73	NO	ADSST-AVR-1100	LHF16JT2-1BFA	3.3	YES	NO
	PX	Y3	2-91	YES	ADSST-AVR-1100	LHF16JT2-1BFA	3.3	NO	YES
KRF-X9090D-S	EUROPE	E4	2-73	NO	ADSST-AVR-1100	LHF16JT2-1BFA	3.3	YES	NO
	AUSTRALIA	X4	0-13	NO	ADSST-AVR-1100	LHF16JT2-1BFA	2.2	YES	NO
	PX	Y4	2-91	YES	ADSST-AVR-1100	LHF16JT2-1BFA	3.3	NO	YES
VR-9080	U.S.A.	K5	0-13	NO	ADSST-AVR-1100	LHF16JT2-1BFA	2.2	YES	NO
	CANADA	P5							
VR-9080-S	U.S.A.	K6							
	CANADA	P6							
VR-9560	U.S.A.	K7	0-14	NO	ADSST-AVR-1105	LHF16JT2-1BEA	2.2	YES	NO
	CANADA	P7							
VR-9560-S	U.S.A.	K8							
	CANADA	P8							

KRF-V8090D/X9090D/VR-9560/9080



U
V
W
X
Y
Z
AA
AB
AC
AD
1
2
3
4
5
6
7
(X09-6960-11) (A/4)
WH10-2
GND
GND
J11
PHONO
Lch
Rch
CD/DVD
J12
MD/TAPE REC
MD/TAPE PLAY
J21
VIDEO 1 REC
VIDEO 1 PLAY
J22
VIDEO 2
VIDEO 3
J3
FL
FR
SL
SR
C
SW
DVD/6ch
BL-3
5/5 X14-A/11-WH93
FRONT-R CN10
FRONT-L CN11
CENTER CN12
SURROUND-R CN13
SURROUND-L CN14
SURROUND-BACK-L CN15
PHONO EQ AMP
R OUT
L OUT
IC1 (2/2)
IC1 (1/2)
MD/TAPE REC OUT
VIDEO1 REC OUT
*IC2
INPUT SELECTOR & E.VOLUME
IC800
PHONO/MIC SELECTOR
PROTECTION
POWER AMP
IDLE ADJ.(F Rch)
IDLE ADJ.(F Lch)
IDLE ADJ.(Cch)
CURRENT MIRROR
2ND
1ST
FRONT Rch
FRONT Lch
CENTERch
6dB ATT.
CN4
WH21-1
WH800-2
CN22
(X09-) (B/4)
WH21
+12V
G GND
L.TUNER
G.GND
R.TUNER
CN21
to TUNER PACK
X08-CN4 1/5
S-2
WH800-1
CN800
WH221
WH7-2
WH7-1
BK-4
5/5 X14-H/11-WH21
3/5 X13-D/6-CN303
AS-7
4/5 X13-B/6-CN151
BC-5
WH5-2
WH5-1
CN59
CN58
CN5
AO-2
3/5 X13-E/6-CN709
AO-1
3/5 X13-E/6-CN708

IC1 : NJM4580L-ZB
IC2 : *
IC800 : CD4052BE

Q1-4,21-24,41,43,308,359,
362,365,607 : 2SA992(F,E)
Q5,6,25,26,45 : 2SA1123(R,S)
Q7-10,27-30,47,49 : 2SC2631(R,S)
Q11,12,31,32,51,52 : *
Q13,14,33,34,53,54 : *
Q302 : DTC113ZSA
Q303 : 2SC3940A(R,S)
Q304,306 : 2SB1640

Q305,313 : DTC143ZSA
Q307 : 2SD2525
Q309-312 : KTC3200-P
Q331-335,605,606 : 2SC2878(B)-F
Q353-358,360,361,363,364,
602-604 : 2SC1845(F,E)
Q610 : 2SD2012
Q611 : KTC3199(Y,GR)
Q612 : KTA1267(Y,GR)

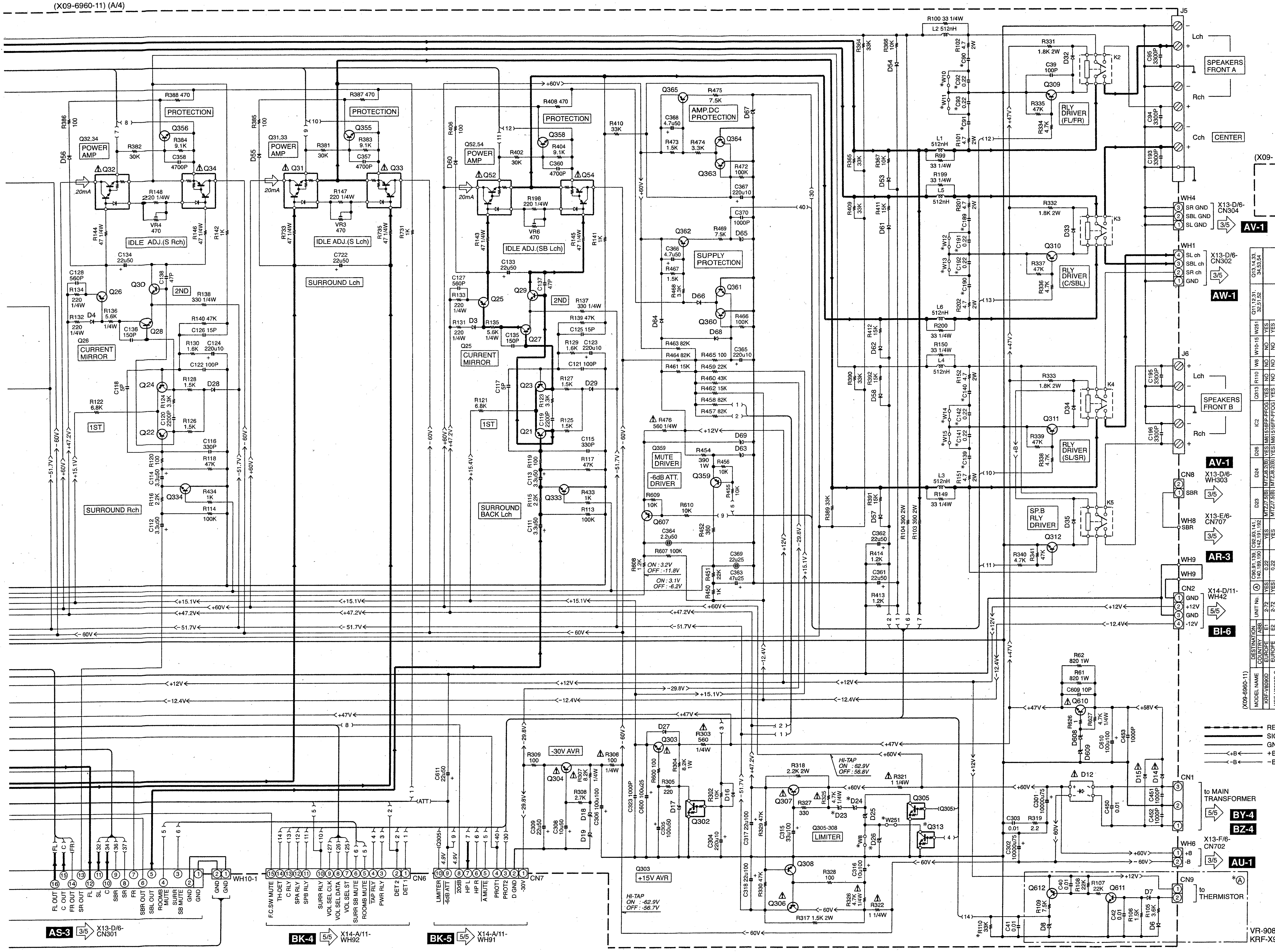
D1-6,16,28,29,32-35,53,54,57,58,
61,62,64,66,68,602-604
: 1SS133
D7,22 : MTZJ5.1(B)
D8,26,63,65,67,69 : MTZJ3.9(B)
D12 : D5SBA20-7000
D14,15 : S5688B
D17,19 : MTZJ16(B)
D18 : MTZJ15(B)

D20 : MTZJ6.2(B)
D21 : MTZJ6.8(B)
D23 : *
D24 : *
D25,608 : MTZJ30(B)
D27,51,52,55,56,59,60
: 1SS244
D609 : MTZJ20(B)
D800,801 : MTZJ5.6(B)

KRF-V8090D/X9090D/VR-9560/9080

The DC voltage is an actual reading measured with a high impedance type voltmeter with no signal input. The measurement value may vary depending on the measuring instruments used or on the product.

(X09-6960-11) (A/4)


PROTECTION
POWER AMP
IDLE ADJ.(S Rch)
IDLE ADJ.(S Lch)
IDLE ADJ.(SB Lch)
SURROUND Rch
SURROUND Lch
SURROUND BACK Lch
CURRENT MIRROR
1ST
2ND
AMP.DC PROTECTION
SUPPLY PROTECTION
MUTE DRIVER
-6dB ATT. DRIVER
RLY DRIVER (FL/FR)
RLY DRIVER (C/SBL)
RLY DRIVER (SL/SR)
SP.B RLY DRIVER
SPEAKERS FRONT A
SPEAKERS FRONT B
CENTER
-30V AVR
+15V AVR
LIMITER
HI-TAP ON : 62.9V OFF : 56.8V
HI-TAP ON : -62.9V OFF : -56.7V
to MAIN TRANSFORMER
to THERMISTOR
(X09-) (D/4)
AS-3 3/5 X13-D/6-CN301
BK-4 5/5 X14-A/11-WH92
BK-5 5/5 X14-A/11-WH91
AV-1 3/5 X13-D/6-CN304
AW-1 3/5 X13-D/6-CN302
AV-1 3/5 X13-D/6-WH303
AR-3 3/5 X13-E/6-CN707
BI-6 5/5 X14-D/11-WH42
BY-4 5/5
BZ-4
AU-1 3/5 X13-F/6-CN702
VR-9080/9560 (2/5)
KRF-X9090D/V8090D (2/5)

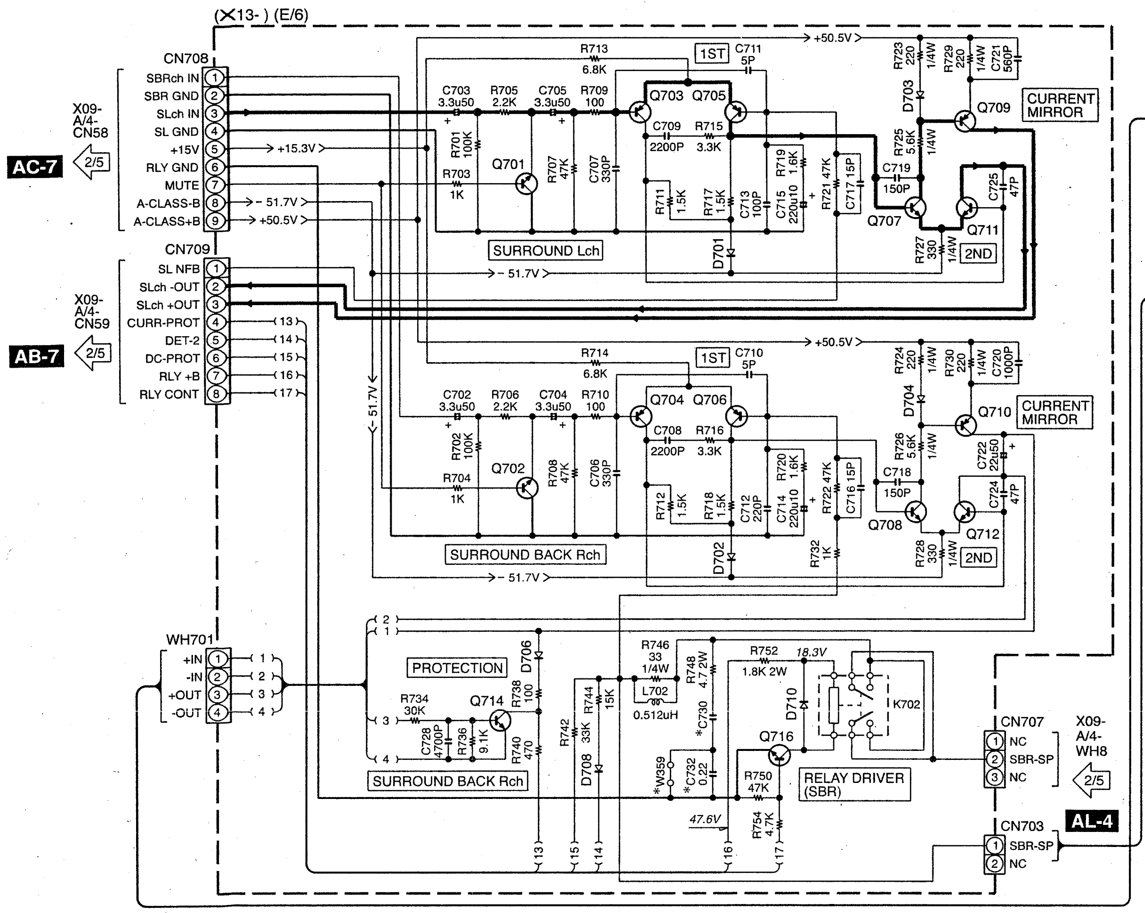
(X09-6960-11)

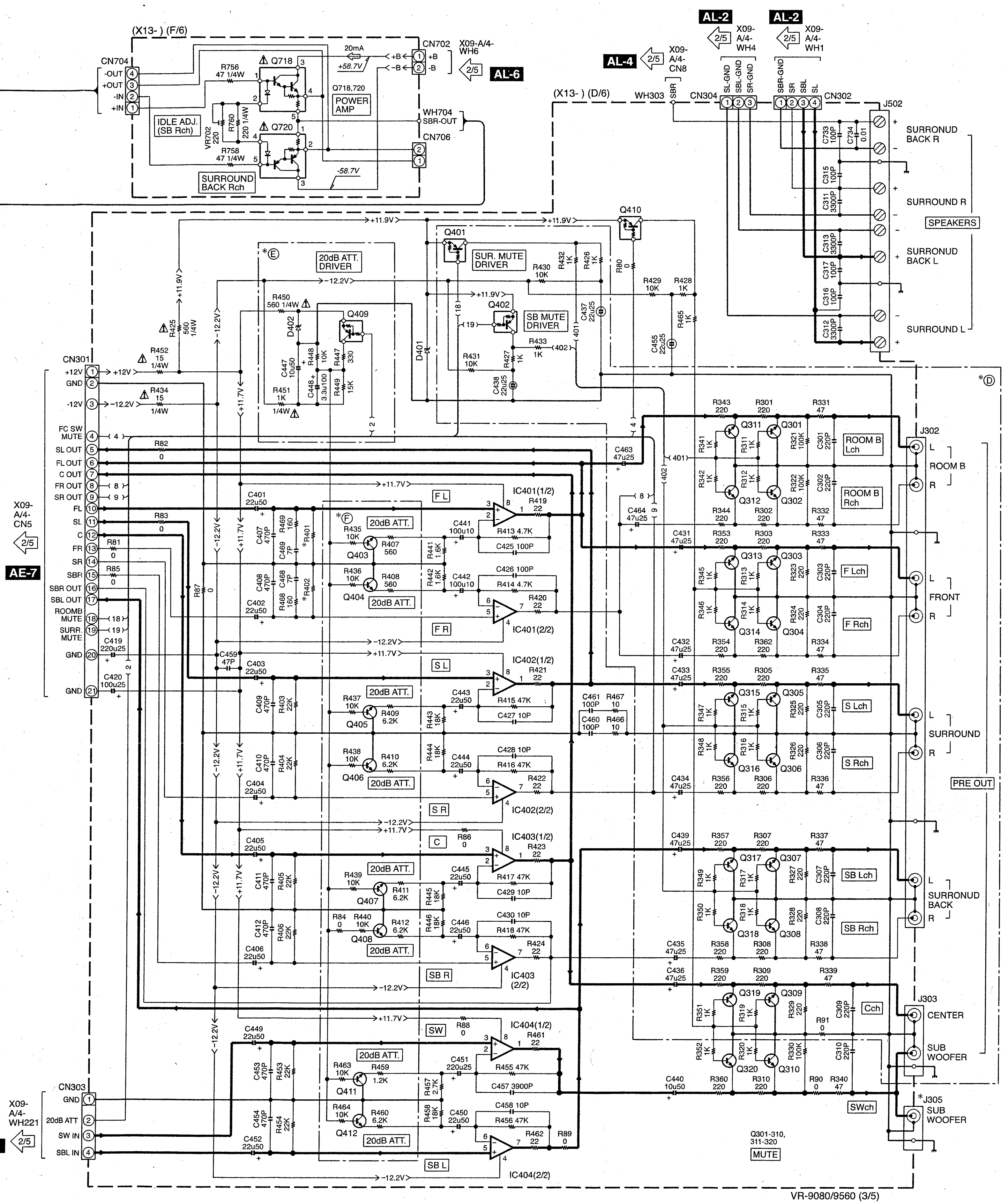
MODEL NAME	DESTINATION COUNTRY	DESTINATION ABB.	UNIT No.	Ⓐ	C90,91,139, 140,189,190	C92,93,141, 142,191,192	D23	D24	D26	IC2	Q313	R110	W8	W10-15	W251	Q11,12,31, 32,51,52	Q13,14,33, 34,53,54
KRF-V8090D	EUROPE	E1	2-72	YES	0.22	YES	MTZJ7.5(B)	MTZJ8.2(B)	YES	M61516FP-PFOG	YES	NO	NO	NO	YES	TRAIT3KNNF	TRAIT3KPNF
KRF-V8090D-S	EUROPE	E2	2-72	YES	0.22	YES	MTZJ7.5(B)	MTZJ8.2(B)	YES	M61516FP-PFOG	YES	NO	NO	NO	YES		
	AUSTRALIA	X2	0-72	YES	0.22	YES	MTZJ13(B)	MTZJ7.5(B)	NO	M61516FP-PFOG	NO	NO	YES	NO	NO		
KRF-X9090D	EUROPE	E3	2-72	YES	0.22	YES	MTZJ7.5(B)	MTZJ8.2(B)	YES	M61516FP-PFOG	YES	NO	NO	NO	YES		
	PX	Y3	0-72	YES	0.22	YES	MTZJ13(B)	MTZJ7.5(B)	NO	M61516FP-PFOG	NO	NO	YES	NO	NO		
KRF-X9090D-S	EUROPE	E4	2-72	YES	0.22	YES	MTZJ7.5(B)	MTZJ8.2(B)	YES	M61516FP-PFOG	YES	NO	NO	NO	YES		
	AUSTRALIA	X4	0-72	YES	0.22	YES	MTZJ13(B)	MTZJ7.5(B)	NO	M61516FP-PFOG	NO	NO	YES	NO	NO		
	PX	Y4															
VR-9080	U.S.A.	K5	0-11	NO	0.1	NO	MTZJ15(B)	MTZJ8.2(B)	NO	M61516FP	NO	YES	YES	YES	NO	TRAIT3KN	TRAIT3KP
	CANADA	P5															
VR-9080-S	U.S.A.	K6															
	CANADA	P6															
VR-9560	U.S.A.	K7															
	CANADA	P7															
VR-9560-S	U.S.A.	K8															
	CANADA	P8															

▬ ▬ ▬ RECORDING LINE
━━━ SIGNAL LINE
──── GND LINE
<+B← +B LINE
<-B← −B LINE

CAUTION: For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list). ⚠ indicates safety critical components. For continued protection against risk of fire, replace only with same type and rating fuse(s). To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.

KRF-V8090D/X9090D/VR-9560/9080


(X13-) (E/6)
CN708
SBRch IN
SBR GND
SLch IN
SL GND
+15V
RLY GND
MUTE
A-CLASS-B
A-CLASS+B
X09-A/4-CN58
AC-7
2/5
CN709
SL NFB
SLch -OUT
SLch +OUT
CURR-PROT
DET-2
DC-PROT
RLY +B
RLY CONT
X09-A/4-CN59
AB-7
2/5
+50.5V
+15.3V
-51.7V
1ST
2ND
CURRENT MIRROR
SURROUND Lch
SURROUND BACK Rch
Q701
Q702
Q703 Q705
Q704 Q706
Q707
Q708
Q709
Q710
Q711
Q712
WH701
+IN
-IN
+OUT
-OUT
PROTECTION
Q714
L702 0.512uH
R752 18.3V 1.8K 2W
K702
D710
Q716
RELAY DRIVER (SBR)
47.6V
CN707
NC
SBR-SP
X09-A/4-WH8
2/5
CN703
SBR-SP
NC
AL-4


(X13-) (F/6)
CN704
-OUT
+OUT
-IN
+IN
R756 47 1/4W
Q718
Q720
20mA
+58.7V
-58.7V
IDLE ADJ. (SB Rch)
VR702
POWER AMP
Q718,720
SURROUND BACK Rch
CN702
X09-A/4-WH6
AL-6
2/5
WH704
SBR-OUT
CN706
AL-4
X09-A/4-CN8
AL-2
X09-A/4-WH4
X09-A/4-WH1
(X13-) (D/6)
WH303
CN304
CN302
J502
SURRONUD BACK R
SURROUND R
SPEAKERS
SURRONUD BACK L
SURROUND L
Q410
Q401
SUR. MUTE DRIVER
Q402
SB MUTE DRIVER
20dB ATT. DRIVER
Q409
+11.9V
-12.2V
CN301
+12V
GND
-12V
FC SW MUTE
SL OUT
FL OUT
C OUT
FR OUT
SR OUT
FL
SL
C
FR
SR
SBR
SBR OUT
SBL OUT
ROOMB MUTE
SURR. MUTE
GND
X09-A/4-CN5
AE-7
2/5
IC401(1/2)
IC401(2/2)
IC402(1/2)
IC402(2/2)
IC403(1/2)
IC403(2/2)
IC404(1/2)
IC404(2/2)
20dB ATT.
FL
FR
SL
SR
C
SW
SB R
SB L
Q403
Q404
Q405
Q406
Q407
Q408
Q411
Q412
CN303
GND
20dB ATT
SW IN
SBL IN
X09-A/4-WH221
Z-6
2/5
ROOM B Lch
ROOM B Rch
F Lch
F Rch
S Lch
S Rch
SB Lch
SB Rch
Cch
SWch
J302
ROOM B
FRONT
SURROUND
SURRONUD BACK
PRE OUT
J303
CENTER
SUB WOOFER
*J305
SUB WOOFER
Q301-310, 311-320
MUTE
*Ⓓ
*Ⓔ
*Ⓕ

(X13-7960-13)

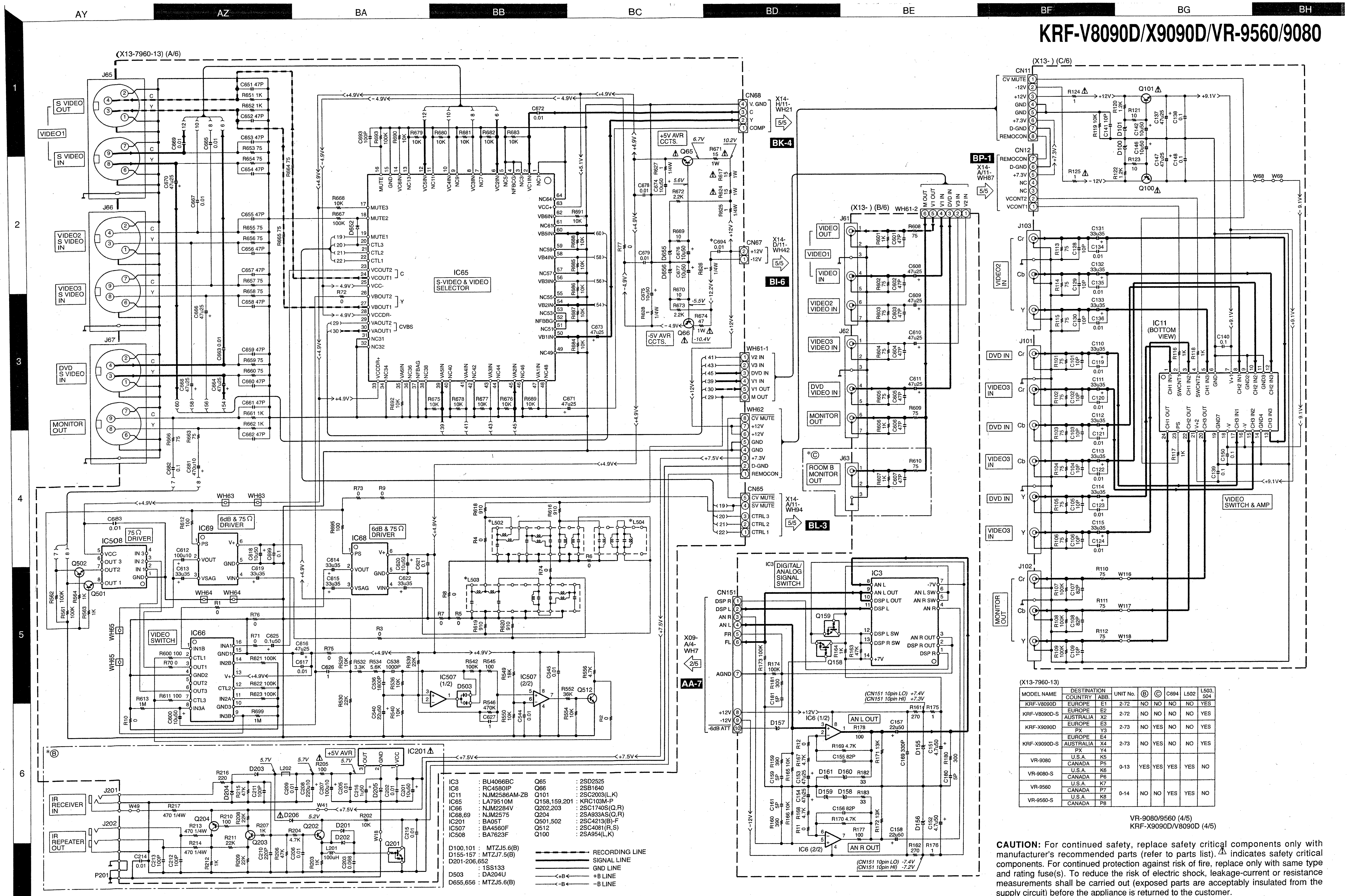
MODEL NAME	DESTINATION		UNIT No.	Ⓓ Ⓔ Ⓕ	C730	C732	J305	R401, 402	W359	Q718	Q720
	COUNTRY	ABB.									
KRF-V8090D	EUROPE	E1	2-72	NO	0.22	YES	YES	100K	NO	TRAIT3KNNF	TRAIT3KPNF
KRF-V8090D-S	EUROPE	E2	2-72	NO	0.22	YES	YES	100K	NO		
	AUSTRALIA	X2									
KRF-X9090D	EUROPE	E3	2-73	YES	0.22	YES	NO	18K	NO		
	PX	Y3									
KRF-X9090D-S	EUROPE	E4	2-73	YES	0.22	YES	NO	18K	NO		
	AUSTRALIA	X4									
	PX	Y4									
VR-9080	U.S.A.	K5	0-13	YES	0.1	NO	NO	18K	YES	TRAIT3KN	TRAIT3KP
	CANADA	P5									
VR-9080-S	U.S.A.	K6									
	CANADA	P6									
VR-9560	U.S.A.	K7	0-14	NO	0.1	NO	YES	100K	YES		
	CANADA	P7									
VR-9560-S	U.S.A.	K8									
	CANADA	P8									

IC401-404	: RC45801P
Q301-320,403-408,411, 412,701,702	: 2SC2878(B)-F
Q401,402,410	: DTA124EUA
Q409	: KRA103M
Q703-706	: 2SA992(F,E)
Q707,708,711,712	: 2SC2631(R,S)
Q709,710	: 2SA1123(R,S)
Q714	: 2SC1845(F,E)
Q716	: KTC3200
Q718	: *
Q720	: *
D401	: MTZJ3.9(B)
D402	: MTZJ5.1(B)
D701-704,708,710	: 1SS133
D706	: 1SS244

━━━━ SIGNAL LINE
──── GND LINE
──<+B←── +B LINE
──<-B←── −B LINE

CAUTION: For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list). ⚠ indicates safety critical components. For continued protection against risk of fire, replace only with same type and rating fuse(s). To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.

The DC voltage is an actual reading measured with a high impedance type voltmeter with no signal input. The measurement value may vary depending on the measuring instruments used or on the product.


AY
AZ
BA
BB
BC
BD
BE
BF
BG
BH
1
2
3
4
5
6
7
(X13-7960-13) (A/6)
J65
S VIDEO OUT
VIDEO1
S VIDEO IN
J66
VIDEO2 S VIDEO IN
VIDEO3 S VIDEO IN
J67
DVD S VIDEO IN
MONITOR OUT
IC65
S-VIDEO & VIDEO SELECTOR
CN68
X14-H/11-WH21
BK-4
+5V AVR CCTS.
Q65
Q66
-5V AVR CCTS.
CN67
X14-D/11-WH42
BI-6
WH61-1
WH62
CN65
X14-A/11-WH94
BL-3
IC508
75Ω DRIVER
IC69
6dB & 75Ω DRIVER
IC68
6dB & 75Ω DRIVER
IC66
VIDEO SWITCH
IC507 (1/2)
IC507 (2/2)
Q512
Q501
Q502
WH63
WH64
WH65
*Ⓑ
+5V AVR
IC201
IR RECEIVER IN
IR REPEATER OUT
J201
J202
P201
Q204
Q203
Q202
Q201
X09-A/4-WH7
AA-7
CN151
IC3 DIGITAL/ANALOG SIGNAL SWITCH
IC3
Q159
Q158
IC6 (1/2)
IC6 (2/2)
AN L OUT
AN R OUT
(CN151 10pin LO) +7.4V
(CN151 10pin HI) +7.3V
(CN151 10pin LO) -7.4V
(CN151 10pin HI) -7.2V
(X13-) (B/6)
WH61-2
J61
VIDEO OUT
VIDEO1
VIDEO IN
VIDEO2 VIDEO IN
J62
VIDEO3 VIDEO IN
DVD VIDEO IN
MONITOR OUT
*Ⓒ
ROOM B MONITOR OUT
J63
(X13-) (C/6)
CN11
CN12
BP-1
X14-A/11-WH87
Q101
Q100
J103
VIDEO2 IN
J101
DVD IN
VIDEO3 IN
IC11 (BOTTOM VIEW)
J102
MONITOR OUT
VIDEO SWITCH & AMP
RECORDING LINE
SIGNAL LINE
GND LINE
+B LINE
−B LINE

IC3 : BU4066BC
IC6 : RC4580IP
IC11 : NJM2586AM-ZB
IC65 : LA79510M
IC66 : NJM2284V
IC68,69 : NJM2575
IC201 : BA05T
IC507 : BA4560F
IC508 : BA7623F

Q65 : 2SD2525
Q66 : 2SB1640
Q101 : 2SC2003(L,K)
Q158,159,201 : KRC103M-P
Q202,203 : 2SC1740S(Q,R)
Q204 : 2SA933AS(Q,R)
Q501,502 : 2SC4213(B)-F
Q512 : 2SC4081(R,S)
Q100 : 2SA954(L,K)

D100,101 : MTZJ5.6(B)
D155-157 : MTZJ7.5(B)
D201-206,652 : 1SS133
D503 : DA204U
D655,656 : MTZJ5.6(B)

(X13-7960-13)

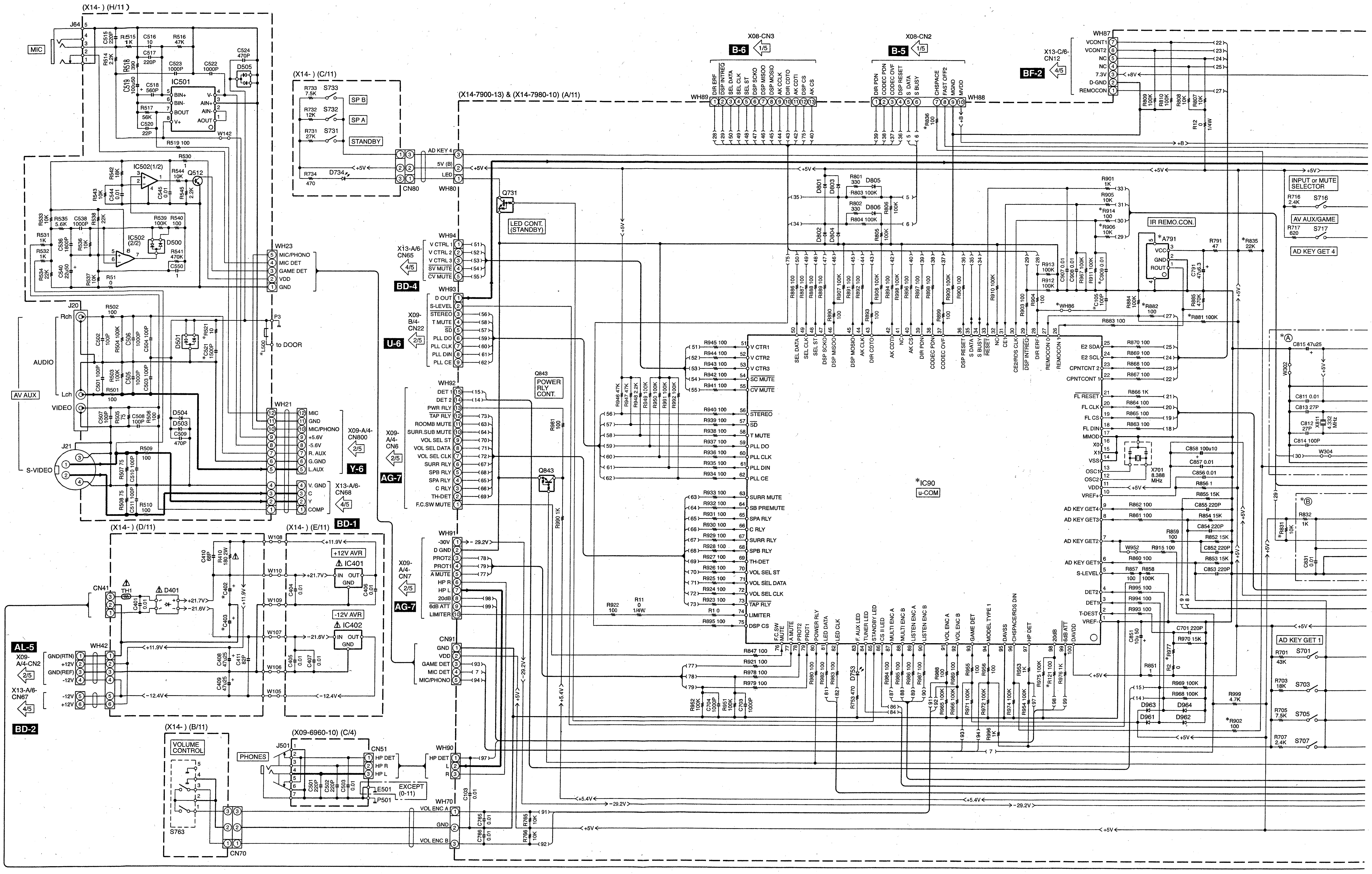
MODEL NAME	DESTINATION		UNIT No.	Ⓑ	Ⓒ	C694	L502	L503, 504
	COUNTRY	ABB.						
KRF-V8090D	EUROPE	E1	2-72	NO	NO	NO	NO	YES
KRF-V8090D-S	EUROPE	E2	2-72	NO	NO	NO	NO	YES
	AUSTRALIA	X2						
KRF-X9090D	EUROPE	E3	2-73	NO	YES	NO	NO	YES
	PX	Y3						
KRF-X9090D-S	EUROPE	E4	2-73	NO	YES	NO	NO	YES
	AUSTRALIA	X4						
	PX	Y4						
VR-9080	U.S.A.	K5	0-13	YES	YES	YES	YES	NO
	CANADA	P5						
VR-9080-S	U.S.A.	K6						
	CANADA	P6						
VR-9560	U.S.A.	K7	0-14	NO	NO	YES	YES	NO
	CANADA	P7						
VR-9560-S	U.S.A.	K8						
	CANADA	P8						

VR-9080/9560 (4/5)
KRF-X9090D/V8090D (4/5)

CAUTION: For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list). ⚠ indicates safety critical components. For continued protection against risk of fire, replace only with same type and rating fuse(s). To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.

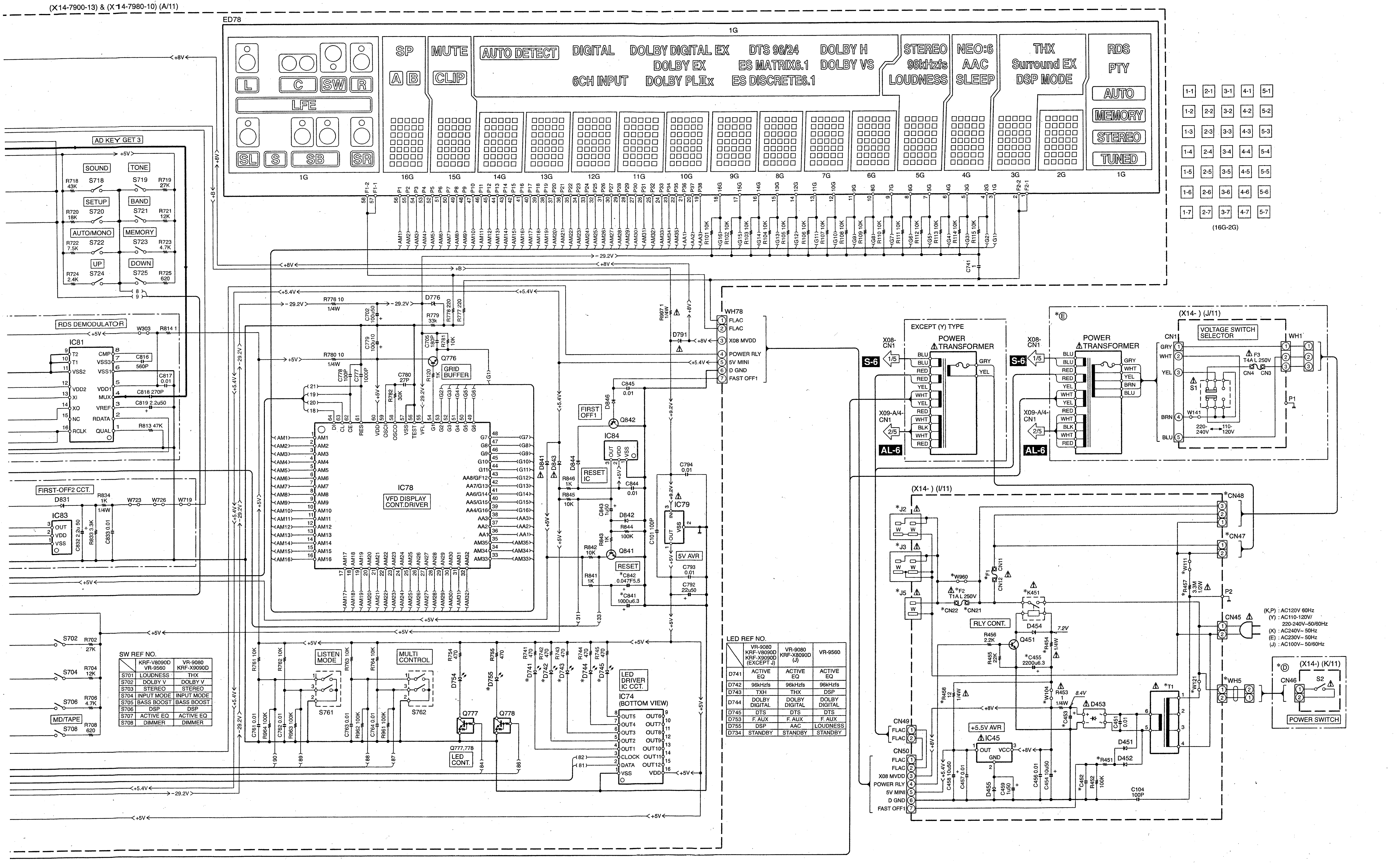
The DC voltage is an actual reading measured with a high impedance type voltmeter with no signal input. The measurement value may vary depending on the measuring instruments used or on the product.

KRF-V8090D/X9090D/VR-9560/9080


(X14-) (H/11)
MIC
J64
IC501
IC502(1/2)
IC502 (2/2)
Q512
D500
D505
WH23
MIC/PHONO
MIC DET
GAME DET
VDD
GND
(X14-) (C/11)
SP B
SP A
STANDBY
S733
S732
S731
D734
CN80
AD KEY 4
5V (B)
LED
WH80
(X14-7900-13) & (X14-7980-10) (A/11)
Q731
LED CONT. (STANDBY)
X08-CN3
B-6
X08-CN2
B-5
WH89
WH88
DIR ERF
DSP INTREQ
SEL DATA
SEL CLK
SEL ST
DSP SCKO
DSP MISOO
DSP MOSIO
AK CCLK
DIR CDTO
AK CDTI
DSP CS
AK CS
DIR PDN
CODEC PDN
CODEC OVF
DSP RESET
S DATA
S BUSY
CHSPACE
FAST OFF2
MGND
MVDD
X13-C/6-CN12
BF-2
WH87
VCONT1
VCONT2
NC
7.3V
D-GND
REMOCON
INPUT or MUTE SELECTOR
S716
AV AUX/GAME
S717
AD KEY GET 4
IR REMO.CON.
A791
VCC
GND
ROUT
J20
Rch
Lch
AUDIO
AV AUX
VIDEO
S-VIDEO
J21
to DOOR
P3
WH21
R. AUX
G.GND
L.AUX
X09-A/4-CN800
Y-6
V. GND
C
Y
COMP
X13-A/6-CN68
BD-1
X13-A/6-CN65
BD-4
WH94
V CTRL 1
V CTRL 2
V CTRL 3
SV MUTE
CV MUTE
WH93
D OUT
S-LEVEL
STEREO
T MUTE
SD
PLL DO
PLL CLK
PLL DIN
PLL CE
X09-B/4-CN22
U-6
WH92
DET 1
DET 2
PWR RLY
TAP RLY
ROOMB MUTE
SURR.SUB MUTE
VOL SEL ST
VOL SEL DATA
VOL SEL CLK
SURR RLY
SPB RLY
SPA RLY
C RLY
TH-DET
F.C.SW MUTE
X09-A/4-CN6
AG-7
Q843
POWER RLY CONT.
*IC90
u-COM
(X14-) (D/11)
(X14-) (E/11)
CN41
TH1
D401
+12V AVR
IC401
-12V AVR
IC402
WH42
AL-5
X09-A/4-CN2
X13-A/6-CN67
BD-2
WH91
-30V
D GND
PROT2
PROT1
A MUTE
HP R
HP L
20dB
6dB ATT
LIMITER
X09-A/4-CN7
WH91
CN91
GAME DET
MIC DET
MIC/PHONO
(X14-) (B/11)
VOLUME CONTROL
S763
CN70
(X09-6960-10) (C/4)
PHONES
J501
CN51
HP DET
HP R
HP L
E501
P501
EXCEPT (0-11)
WH90
WH70
VOL ENC A
VOL ENC B
X701 8.388 MHz
AD KEY GET 1
S701
S703
S705
S707
D961
D962
D963
D964
E2 SDA
E2 SCL
CPNTCNT 2
CPNTCNT 1
FL RESET
FL CLK
FL CS
FL DIN
MMOD
AD KEY GET4
AD KEY GET3
AD KEY GET2
AD KEY GET1
S-LEVEL
DET2
DET1
T-DEST
VREF-
SURR MUTE
SB PREMUTE
SPA RLY
C RLY
SURR RLY
SPB RLY
TH-DET
VOL SEL ST
VOL SEL DATA
VOL SEL CLK
TAP RLY
LIMITER
DSP CS
F.C.SW MUTE
A MUTE
PROT2
PROT1
POWER RLY
LED DATA
LED CLK
F. AUX LED
TUNER LED
STANDBY LED
CS II LED
MULTI ENC A
MULTI ENC B
LISTEN ENC A
LISTEN ENC B
VOL ENC A
VOL ENC B
GAME DET
MODEL TYPE 1
DAVSS
CHSPACE/RDS DIN
HP DET
20dB
6dB ATT
DAVDD
W302
W304
C815 47u25

KRF-V8090D/X9090D/VR-9560/9080

(X14-7900-13) & (X14-7980-10) (A/11)


ED78
1G
AUTO DETECT
DIGITAL
DOLBY DIGITAL EX
DTS 96/24
DOLBY H
DOLBY EX
ES MATRIX6.1
DOLBY VS
6CH INPUT
DOLBY PLIIx
ES DISCRETE6.1
STEREO
96kHzfs
LOUDNESS
NEO:6
AAC
SLEEP
THX
Surround EX
DSP MODE
RDS
PTY
AUTO
MEMORY
STEREO
TUNED
SP
MUTE
CLIP
LFE
L C SW R
SL S SB SR
16G 15G 14G 13G 12G 11G 10G 9G 8G 7G 6G 5G 4G 3G 2G 1G
(16G-2G)
AD KEY GET 3
SOUND S718
TONE S719
SETUP S720
BAND S721
AUTO/MONO S722
MEMORY S723
UP S724
DOWN S725
RDS DEMODULATOR
IC81
FIRST-OFF2 CCT.
IC83
IC78
VFD DISPLAY CONT.DRIVER
Q776
GRID BUFFER
IC84
RESET IC
FIRST OFF1
Q842
Q841
RESET
IC79
5V AVR
WH78
FLAC
X08 MVDD
POWER RLY
5V MINI
D GND
FAST OFF1
S702 S704 S706 S708
MD/TAPE
LISTEN MODE
S761
MULTI CONTROL
S762
Q777 Q778
Q777,778
LED CONT.
IC74
LED DRIVER IC CCT.
(BOTTOM VIEW)
EXCEPT (Y) TYPE
POWER TRANSFORMER
X08-CN1
X09-A/4-CN1
S-6
AL-6
*Ⓔ
(X14-) (J/11)
VOLTAGE SWITCH SELECTOR
WH1
CN1
220-240V
110-120V
(X14-) (I/11)
*CN48
*CN47
*J2
*J3
*J5
RLY CONT.
Q451
+5.5V AVR
IC45
CN49
CN50
CN45
P1
P2
*T1
*WH5
*Ⓓ
(X14-) (K/11)
CN46
S2
POWER SWITCH

SW REF NO.

	KRF-V8090D VR-9560	VR-9080 KRF-X9090D
S701	LOUDNESS	THX
S702	DOLBY V	DOLBY V
S703	STEREO	STEREO
S704	INPUT MODE	INPUT MODE
S705	BASS BOOST	BASS BOOST
S706	DSP	DSP
S707	ACTIVE EQ	ACTIVE EQ
S708	DIMMER	DIMMER

LED REF NO.

	VR-9080 KRF-V8090D KRF-X9090D (EXCEPT J)	VR-9080 KRF-X8090D (J)	VR-9560
D741	ACTIVE EQ	ACTIVE EQ	ACTIVE EQ
D742	96kHzfs	96kHzfs	96kHzfs
D743	TXH	THX	DSP
D744	DOLBY DIGITAL	DOLBY DIGITAL	DOLBY DIGITAL
D745	DTS	DTS	DTS
D753	F. AUX	F. AUX	F. AUX
D755	DSP	AAC	LOUDNESS
D734	STANDBY	STANDBY	STANDBY

(K,P) : AC120V 60Hz
(Y) : AC110-120V/
220-240V~50/60Hz
(X) : AC240V~ 50Hz
(E) : AC230V~ 50Hz
(J) : AC100V~ 50/60Hz

KRF-V8090D/X9090D/VR-9560/9080

ANODE CONNECTION

	1G	2G	3G	4G	5G	6-14G	15G	16G
P1	L	1-1	1-1	1-1	1-1	1-1	1-1	1-1
P2	C	2-1	2-1	2-1	2-1	2-1	2-1	2-1
P3	R	3-1	3-1	3-1	3-1	3-1	3-1	3-1
P4	SR	4-1	4-1	4-1	4-1	4-1	4-1	4-1
P5	SB	5-1	5-1	5-1	5-1	5-1	5-1	5-1
P6	SL	1-2	1-2	1-2	1-2	1-2	1-2	1-2
P7	S	2-2	2-2	2-2	2-2	2-2	2-2	2-2
P8	SW	3-2	3-2	3-2	3-2	3-2	3-2	3-2
P9	LFE	4-2	4-2	4-2	4-2	4-2	4-2	4-2
P10	(L)	5-2	5-2	5-2	5-2	5-2	5-2	5-2
P11	(C)	1-3	1-3	1-3	1-3	1-3	1-3	1-3
P12	(R)	2-3	2-3	2-3	2-3	2-3	2-3	2-3
P13	(SR)	3-3	3-3	3-3	3-3	3-3	3-3	3-3
P14	(SBR)	4-3	4-3	4-3	4-3	4-3	4-3	4-3
P15	(SBL)	5-3	5-3	5-3	5-3	5-3	5-3	5-3
P16	(SL)	1-4	1-4	1-4	1-4	1-4	1-4	1-4
P17	(SW)	2-4	2-4	2-4	2-4	2-4	2-4	2-4
P18	AUTO DETECT	3-4	3-4	3-4	3-4	3-4	3-4	3-4
P19	DIGITAL	4-4	4-4	4-4	4-4	4-4	4-4	4-4
P20	6CH INPUT	5-4	5-4	5-4	5-4	5-4	5-4	5-4
P21	DOLBY DIGITAL	1-5	1-5	1-5	1-5	1-5	1-5	1-5
P22	(DOLBY DIGITAL) EX	2-5	2-5	2-5	2-5	2-5	2-5	2-5
P23	DOLBY EX	3-5	3-5	3-5	3-5	3-5	3-5	3-5
P24	DOLBY PL	4-5	4-5	4-5	4-5	4-5	4-5	4-5
P25	II	5-5	5-5	5-5	5-5	5-5	5-5	5-5
P26	x	1-6	1-6	1-6	1-6	1-6	1-6	1-6
P27	DTS	2-6	2-6	2-6	2-6	2-6	2-6	2-6
P28	96/24	3-6	3-6	3-6	3-6	3-6	3-6	3-6
P29	ES MATRIX6.1	4-6	4-6	4-6	4-6	4-6	4-6	4-6
P30	ES DISCRETE6.1	5-6	5-6	5-6	5-6	5-6	5-6	5-6
P31	DOLBY H	1-7	1-7	1-7	1-7	1-7	1-7	1-7
P32	DOLBY VS	2-7	2-7	2-7	2-7	2-7	2-7	2-7
P33	RDS	3-7	3-7	3-7	3-7	3-7	3-7	3-7
P34	PTY	4-7	4-7	4-7	4-7	4-7	4-7	4-7
P35	AUTO	5-7	5-7	5-7	5-7	5-7	5-7	5-7
P36	MEMORY	—	THX	NEO:6	STEREO	—	MUTE	SP
P37	STEREO	—	Surround EX	AAC	96kHzfs	—	CLIP	A
P38	TUNED	—	DSP MODE	SLEEP	LOUDNESS	—	—	B

CAUTION: For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list). ⚠ indicates safety critical components. For continued protection against risk of fire, replace only with same type and rating fuse(s). To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.

The DC voltage is an actual reading measured with a high impedance type voltmeter with no signal input. The measurement value may vary depending on the measuring instruments used or on the product.

IC45 : BA05T
IC74 : BU2090
IC78 : LC75711NED-E
IC79 : XC6202P502PR
IC81 : BU1924F
IC83 : S-80840CNY-GZ
IC84 : S-80840CNY-GZ
IC90 : *
IC401 : KIA7812API-UP
IC402 : KIA7912API-UP
IC501,502 : BA4560F

Q451,776,841 : 2SC1740S(Q,R)
Q512 : 2SC4081(R,S)
Q731,843 : DTC113ZSA
Q777,778 : DTC124ESA
Q842 : 2SA933AS(Q,R)

D401 : D2SBA207009F01
D451,452,454,501-504, 791,801-806,831,842,844, 846,961-964 : 1SS133
D453 : S1ZB20(7101)
D455,841,843 : RB721Q
D500,505 : 1SS302
D734,753 : B30-2545-05
D741-745,755 : *
D754 : B30-2651-05
D776 : MTZJ5.1(B)

TH1 : MF-R090-99

▬ ▬ ▬ ▬ ▬	RECORDING LINE
━━━━━	SIGNAL LINE
─────	GND LINE
──<+B←──	+B LINE
──<−B←──	−B LINE

(X14-7900-13)

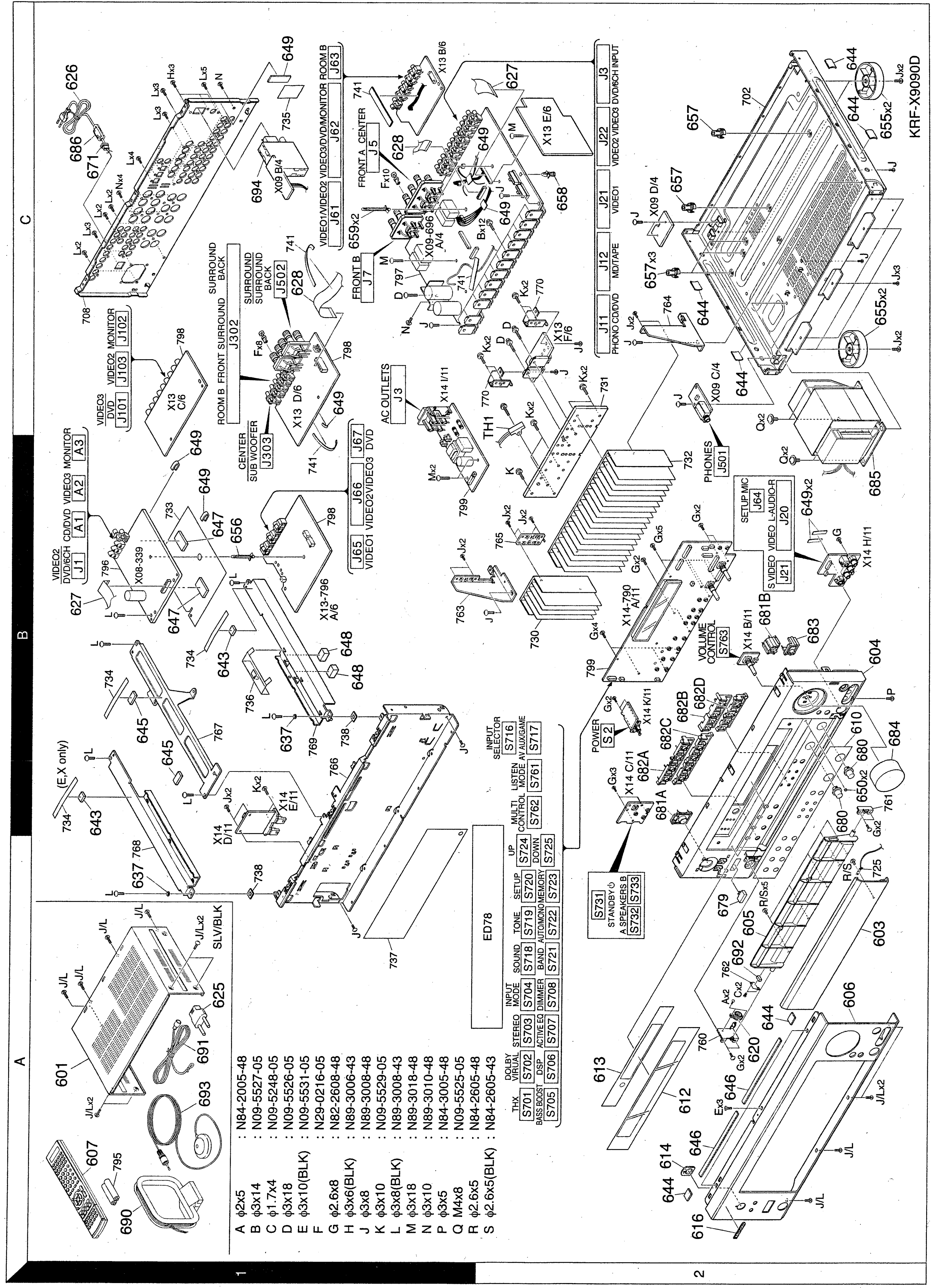
MODEL NAME	DESTINATION COUNTRY	DESTINATION ABB.	UNIT No.	Ⓐ	ⒷⒺ	Ⓓ	A791	C105	C402	C403	C452	C453	C455, 909	C521, 841	C842	CN21, 22	CN47	CN48	D741-745, 755	F1	F2
KRF-V8090D	EUROPE	E1	X14-7902-72	YES	NO	YES	YES	YES	2200u25	1000u25	0.039	3300u25	NO	NO	YES	YES	YES	NO	B30-2651-05	F05-4025-05	F06-1022-05
KRF-V8090D-S	EUROPE	E2	X14-7902-72	YES	NO	YES	YES	YES	2200u25	1000u25	0.039	3300u25	NO	NO	YES	YES	YES	NO	B30-2651-05	F05-4025-05	F06-1022-05
	AUSTRALIA	X2	X14-7900-72	YES	NO	YES	YES	NO	2200u25	1000u25	0.047	3300u25	NO	NO	YES	YES	YES	NO	B30-2545-05	F05-4025-05	F06-1022-05
KRF-X9090D	EUROPE	E3	X14-7902-73	YES	NO	YES	YES	YES	2200u25	1000u25	0.039	3300u25	NO	NO	YES	YES	YES	NO	B30-2651-05	F05-4025-05	F06-1022-05
	PX	Y3	X14-7902-91	NO	YES	YES	YES	NO	2200u35	1000u35	0.068	3300u25	YES	NO	YES	YES	NO	YES	B30-2545-05	F05-4025-05	F06-1022-05
KRF-X9090D-S	EUROPE	E4	X14-7902-73	YES	NO	YES	YES	YES	2200u25	1000u25	0.039	3300u25	NO	NO	YES	YES	YES	NO	B30-2651-05	F05-4025-05	F06-1022-05
	AUSTRALIA	X4	X14-7900-73	YES	NO	YES	YES	NO	2200u25	1000u25	0.047	3300u25	NO	NO	YES	YES	YES	NO	B30-2545-05	F05-4025-05	F06-1022-05
	PX	Y4	X14-7902-91	NO	YES	YES	YES	NO	2200u25	1000u25	0.068	3300u25	YES	NO	YES	YES	NO	YES	B30-2545-05	F05-4025-05	F06-1022-05
VR-9080	U.S.A.	K5	X14-7900-13	NO	NO	NO	NO	NO	2200u25	1000u25	0.1	3300u16	NO	YES	NO	NO	YES	NO	B30-2545-05	F50-0078-05	F50-0220-05
	CANADA	P5																			
VR-9080-S	U.S.A.	K6																			
	CANADA	P6																			
VR-9560	U.S.A.	K7	X14-7980-10	NO	NO	NO	NO	NO	2200u25	1000u25	0.1	3300u16	NO	YES	NO	YES	YES	NO	B30-2545-05	F50-0078-05	F50-0220-05
	CANADA	P7																			
VR-9560-S	U.S.A.	K8																			
	CANADA	P8																			

	UNIT No.	IC90	J2	J3	J5	K451	L500	R121	R451	R454	R457, 521	R458,831, 835,836,906	R881, 882	R902	R914	R977	T1	W104	W111, 121	W960	WH5	WH86
E1	X14-7902-72	MN101C49HYH	NO	YES	NO	S76-0110-05	NO	NO	150K	27	NO	NO	NO	YES	YES	27K	L07-2761-05	YES	NO	NO	YES	YES
E2	X14-7902-72	MN101C49HYH	NO	YES	NO	S76-0110-05	NO	NO	150K	27	NO	NO	NO	YES	YES	27K	L07-2761-05	YES	NO	NO	YES	YES
X2	X14-7900-72	MN101C49HYH	NO	NO	YES	S76-0110-05	NO	NO	150K	27	NO	NO	NO	YES	YES	27K	L07-2758-05	YES	NO	NO	YES	NO
E3	X14-7902-73	MN101C49HYF	NO	YES	NO	S76-0110-05	NO	YES	150K	27	NO	NO	NO	YES	YES	27K	L07-2761-05	YES	NO	NO	YES	YES
Y3	X14-7902-91	MN101C49HYF	YES	NO	NO	S76-0110-05	NO	YES	18K	15	NO	YES	NO	YES	NO	12K	L07-2805-05	YES	NO	NO	YES	NO
E4	X14-7902-73	MN101C49HYF	NO	YES	NO	S76-0110-05	NO	YES	150K	27	NO	NO	NO	YES	YES	27K	L07-2761-05	NO	NO	NO	YES	YES
X4	X14-7900-73	MN101C49HYF	NO	NO	YES	S76-0110-05	NO	YES	150K	27	NO	NO	NO	YES	YES	27K	L07-2758-05	YES	NO	NO	YES	NO
Y4	X14-7902-91	MN101C49HYF	YES	NO	NO	S76-0110-05	NO	YES	18K	15	NO	YES	NO	YES	NO	12K	L07-2805-05	NO	NO	NO	YES	NO
K5	X14-7900-13	MN101C49HYF	YES	NO	NO	S76-0107-05	YES	YES	39K	27	YES	NO	YES	NO	NO	NO	L07-2809-05	YES	YES	YES	NO	NO
P5																						
K6																						
P6																						
K7	X14-7980-10	MN101C49HYF	YES	NO	NO	S76-0107-05	YES	NO	39K	27	YES	NO	NO	NO	NO	NO	L07-2809-05	YES	YES	YES	NO	NO
P7																						
K8																						
P8																						

VR-9080/9560 (5/5)
KRF-X9090D/V8090D (5/5)

KRF-V8090D/X9090D/VR-9560/9080

EXPLODED VIEW


KRF-X9090D
(E,X only)
ED78
VIDEO2 DVD/6CH J1
CD/DVD A1
VIDEO2 A2
VIDEO3 A3
MONITOR
VIDEO3 DVD J101
VIDEO2 J103
MONITOR J102
ROOM B FRONT SURROUND J302
SURROUND BACK
SURROUND SURROUND BACK J502
CENTER SUB WOOFER J303
VIDEO1 J65
VIDEO2 J66
VIDEO3 DVD J67
AC OUTLETS J3
FRONT B J7
FRONT A CENTER J5
VIDEO1 J61
VIDEO2 J62
VIDEO3/DVD/MONITOR ROOM B J63
PHONO CD/DVD J11
MD/TAPE J12
VIDEO1 J21
VIDEO2 VIDEO3 J22
DVD/6CH INPUT J3
PHONES J501
SETUP MIC J64
S VIDEO VIDEO L-AUDIO-R J20 J21
VOLUME CONTROL S763
POWER S2
INPUT SELECTOR S716 S717
LISTEN MODE S761
MULTI CONTROL S762
UP S724 DOWN S725
SETUP S720 MEMORY S723
TONE S719 AUTO/MONO S722
SOUND S718 BAND S721
INPUT MODE S704 DIMMER S708
STEREO S703 ACTIVE EQ S707
DOLBY VIRUAL S702 DSP S706
THX S701 BASS BOOST S705
STANDBY A SPEAKERS B S731 S732 S733
A B C 1 2

A	φ2x5	N84-2005-48
B	φ3x14	N09-5527-05
C	φ1.7x4	N09-5248-05
D	φ3x18	N09-5526-05
E	φ3x10(BLK)	N09-5531-05
F		N29-0216-05
G	φ2.6x8	N82-2608-48
H	φ3x6(BLK)	N89-3006-43
J	φ3x8	N89-3008-48
K	φ3x10	N09-5529-05
L	φ3x8(BLK)	N89-3008-43
M	φ3x18	N89-3018-48
N	φ3x10	N89-3010-48
P	φ3x5	N84-3005-48
Q	M4x8	N09-5525-05
R	φ2.6x5	N84-2605-48
S	φ2.6x5(BLK)	N84-2605-43

Parts with exploded numbers larger than 700 are not supplied.

KRF-V8090D/X9090D/VR-9560/9080

PARTS LIST

* New Parts
Parts without **Parts No.** are not supplied.
Les articles non mentionnes dans le **Parts No.** ne sont pas fournis.
Teile ohne **Parts No.** werden nicht geliefert.

❶

Ref. No	Add-ress	New Parts	Parts No.	Description	Desti-nation	Re-marks
				VR-9080/9560		
601	1A		A01-3950-01	METALLIC CABINET	K5P5K7	
601	1A		A01-3950-01	METALLIC CABINET	P7	
601	1A		A01-3951-01	METALLIC CABINET	K6P6K8	
601	1A		A01-3951-01	METALLIC CABINET	P8	
603	2A		A21-5486-02	DRESSING PANEL	K7P7	
603	2A		A21-5487-02	DRESSING PANEL	K8P8	
603	2A	*	A21-5500-02	DRESSING PANEL	K5P5	
603	2A	*	A21-5501-02	DRESSING PANEL	K6P6	
604	2B		A22-1906-11	SUB PANEL	K5P5K7	
604	2B		A22-1906-11	SUB PANEL	P7	
604	2B		A22-1907-11	SUB PANEL	K6P6K8	
604	2B		A22-1907-11	SUB PANEL	P8	
605	2A		A52-1021-01	DOOR	K5P5K7	
605	2A		A52-1021-01	DOOR	P7	
605	2A		A52-1022-01	DOOR	K6P6K8	
605	2A		A52-1022-01	DOOR	P8	
606	2A	*	A60-2432-01	PANEL	K5P5	
606	2A	*	A60-2433-01	PANEL	K6P6	
606	2A	*	A60-2455-01	PANEL	K7P7	
606	2A	*	A60-2456-01	PANEL	K8P8	
607	1A		A70-1671-05	REMOTE CONTROLLER ASSY	K7K8P7	
607	1A		A70-1671-05	REMOTE CONTROLLER ASSY	P8	
607	1A		A70-1675-05	REMOTE CONTROLLER ASSY	K5K6P5	
607	1A		A70-1675-05	REMOTE CONTROLLER ASSY	P6	
-		*	B60-5557-00	INSTRUCTION MANUAL, EN	K5K6P5	
-		*	B60-5557-00	INSTRUCTION MANUAL, EN	P6	
-		*	B60-5558-00	INSTRUCTION MANUAL, FR	P5P6	
-		*	B60-5603-00	INSTRUCTION MANUAL, EN	K7K8P7	
-		*	B60-5603-00	INSTRUCTION MANUAL, EN	P8	
-		*	B60-5604-00	INSTRUCTION MANUAL, FR	P7P8	
610	2B	*	B03-3951-02	DRESSING PLATE	K5P5	
610	2B	*	B03-3952-02	DRESSING PLATE	K6P6	
610	2B	*	B03-3955-02	DRESSING PLATE	K7P7	
610	2B	*	B03-3956-02	DRESSING PLATE	K8P8	
612	2A		B10-5563-02	FRONT GLASS		
613	2A		B11-1612-13	COLOR FILTER	K5K6P5	
613	2A		B11-1612-13	COLOR FILTER	P6	
613	2A		B11-1616-13	COLOR FILTER	K7K8P7	
613	2A		B11-1616-13	COLOR FILTER	P8	
614	2A		B12-0490-14	INDICATOR ASSY	K5P5K7	
614	2A		B12-0490-14	INDICATOR ASSY	P7	
614	2A		B12-0492-14	INDICATOR ASSY	K6P6K8	
614	2A		B12-0492-14	INDICATOR ASSY	P8	
616	2A		B43-0336-04	BADGE		
620	2A		D39-0321-05	DAMPER		
⚠ 626	1C		E30-7329-05	AC POWER CORD		
627	1B,2C		E35-3216-05	FLAT CABLE		
628	1C		E35-3746-05	FLAT CABLE		
637	1A,1B		F29-0134-04	INSULATING WASHER		
643	1B		G11-2416-04	CUSHION		
644	2A,2C		G11-2885-04	CUSHION		

L : Scandinavia **K** : USA **P** : Canada **R** : Mexico **C** : China **I** : Malaysia
Y : PX(Far East,Hawaii) **T** : England **E** : Europe **G** : Germany **V** : China(Shanghai)
Y : AAFES(Europe) **X** : Australia **Q** : Russia **H** : Korea **M** : Other Areas ⚠ indicates safety critical components.

* New Parts
Parts without **Parts No.** are not supplied.
Les articles non mentionnes dans le **Parts No.** ne sont pas fournis.
Teile ohne **Parts No.** werden nicht geliefert.

❷

Ref. No	Add-ress	New Parts	Parts No.	Description	Desti-nation	Re-marks
645	1B		G11-2886-04	CUSHION		
646	2A		G11-2887-04	CUSHION		
647	1B		G11-2916-04	CUSHION		
648	1B		G11-2958-04	CUSHION		
649	1B,1C		G11-2959-04	CUSHION		
650	2B		G11-2968-04	CUSHION	K5P5K7	
650	2B		G11-2968-04	CUSHION	P7	
650	2B		G11-2969-04	CUSHION	K6P6K8	
650	2B		G11-2969-04	CUSHION	P8	
-			J61-0307-05	WIRE BAND		
655	2C		J02-1467-03	FOOT (D=60,H=21.5)		
656	1B		J19-5915-05	UNIT HOLDER		
657	2C		J19-6002-04	UNIT HOLDER		
658	2C		J19-6069-05	UNIT HOLDER		
659	1C		J19-6312-05	UNIT HOLDER		
⚠ 671	1C		J42-0083-05	POWER CORD BUSHING		
680	2B		K29-8432-04	KNOB	K5P5K7	
680	2B		K29-8432-04	KNOB	P7	
680	2B		K29-8433-04	KNOB	K6P6K8	
680	2B		K29-8433-04	KNOB	P8	
681	2B		K29-8434-13	KNOB	K6P6K8	
681	2B		K29-8434-13	KNOB	P8	
681	2B		K29-8446-13	KNOB	K5P5K7	
681	2B		K29-8446-13	KNOB	P7	
682	2B		K29-8435-11	KNOB	K5P5K7	
682	2B		K29-8435-11	KNOB	P7	
682	2B		K29-8436-11	KNOB	K6P6K8	
682	2B		K29-8436-11	KNOB	P8	
683	2B		K29-8437-14	KNOB ASSY	K5P5K7	
683	2B		K29-8437-14	KNOB ASSY	P7	
683	2B		K29-8439-14	KNOB ASSY	K6P6K8	
683	2B		K29-8439-14	KNOB ASSY	P8	
684	2B		K29-8444-04	KNOB	K5P5K7	
684	2B		K29-8444-04	KNOB	P7	
684	2B		K29-8445-04	KNOB	K6P6K8	
684	2B		K29-8445-04	KNOB	P8	
⚠ 685	2B		L07-3285-15	POWER TRANSFORMER		
A			N84-2005-48	PAN HEAD TAPTITE SCREW		
G			N82-2608-48	BINDING HEAD TAPTITE SCREW		
J			N89-3008-48	BINDING HEAD TAPTITE SCREW		
M			N89-3018-48	BINDING HEAD TAPTITE SCREW		
N			N89-3010-48	BINDING HEAD TAPTITE SCREW		
P			N84-3005-48	PAN HEAD TAPTITE SCREW		
R			N84-2605-48	PAN HEAD TAPTITE SCREW	K6P6K8	
R			N84-2605-48	PAN HEAD TAPTITE SCREW	P8	
690	1A		T90-0893-05	LOOP ANTENNA		
691	1A		T90-0905-05	LEAD WIRE ANTENNA		
692	2A		T99-0672-05	MAGNET		
693	1A	*	T29-0011-05	MICROPHONE UNIT		
⚠ Q11 ,12			TRAIT3KN	TRANSISTOR		
⚠ Q13 ,14			TRAIT3KP	TRANSISTOR		
⚠ Q31 ,32			TRAIT3KN	TRANSISTOR		
⚠ Q33 ,34			TRAIT3KP	TRANSISTOR		

L : Scandinavia **K** : USA **P** : Canada **R** : Mexico **C** : China **I** : Malaysia
Y : PX(Far East,Hawaii) **T** : England **E** : Europe **G** : Germany **V** : China(Shanghai)
Y : AAFES(Europe) **X** : Australia **Q** : Russia **H** : Korea **M** : Other Areas ⚠ indicates safety critical components.

KRF-V8090D/X9090D/VR-9560/9080

PARTS LIST

* New Parts
Parts without **Parts No.** are not supplied.
Les articles non mentionnes dans le **Parts No.** ne sont pas fournis.
Teile ohne **Parts No.** werden nicht geliefert.

❸

Ref. No	Address	New Parts	Parts No.	Description	Destination	Remarks
⚠ Q51 ,52			TRAIT3KN	TRANSISTOR		
⚠ Q53 ,54			TRAIT3KP	TRANSISTOR		
⚠ Q718			TRAIT3KN	TRANSISTOR		
Q720			TRAIT3KP	TRANSISTOR		
694	1C		W02-4614-05	TUNER ASSY		
KRF-V8090D/X9090D						
601	1A		A01-3950-01	METALLIC CABINET	E3Y3E1	
601	1A		A01-3951-01	METALLIC CABINET	E2X2	
601	1A		A01-3951-01	METALLIC CABINET	E4Y4X4	
603	2A		A21-5486-02	DRESSING PANEL	E1	
603	2A		A21-5487-02	DRESSING PANEL	E2X2	
603	2A		A21-5500-02	DRESSING PANEL	E3Y3	
603	2A		A21-5501-02	DRESSING PANEL	E4Y4X4	
604	2B		A22-1906-11	SUB PANEL	E3Y3E1	
604	2B		A22-1907-11	SUB PANEL	E2X2	
604	2B		A22-1907-11	SUB PANEL	E4Y4X4	
605	2A		A52-1021-01	DOOR	E3Y3E1	
605	2A		A52-1022-01	DOOR	E2X2	
605	2A		A52-1022-01	DOOR	E4Y4X4	
606	2A	*	A60-2423-01	PANEL	E3Y3	
606	2A	*	A60-2424-01	PANEL	E4Y4X4	
606	2A	*	A60-2430-01	PANEL	E1	
606	2A	*	A60-2431-01	PANEL	E2X2	
607	1A	*	A70-1672-05	REMOTE CONTROLLER ASSY	E1E2X2	
607	1A		A70-1675-05	REMOTE CONTROLLER ASSY	Y3Y4	
607	1A	*	A70-1676-05	REMOTE CONTROLLER ASSY	E3E4X4	
-		*	B60-5555-00	INSTRUCTION MANUAL, 6-LAN	E1E2	
-		*	B60-5556-00	INSTRUCTION MANUAL, EN	X2	
-		*	B60-5557-00	INSTRUCTION MANUAL, EN	Y3Y4	
-		*	B60-5559-00	INSTRUCTION MANUAL, 6-LAN	E3E4	
-		*	B60-5561-00	INSTRUCTION MANUAL, EN	X4	
610	2B	*	B03-3951-02	DRESSING PLATE	E3Y3	
610	2B	*	B03-3952-02	DRESSING PLATE	E4Y4X4	
610	2B	*	B03-3955-02	DRESSING PLATE	E1	
610	2B	*	B03-3956-02	DRESSING PLATE	E2X2	
612	2A		B10-5563-02	FRONT GLASS	Y3Y4	
612	2A	*	B10-5564-02	FRONT GLASS	E1E2X2	
612	2A	*	B10-5564-02	FRONT GLASS	E3E4X4	
613	2A		B11-1612-13	COLOR FILTER	E3E4Y3	
613	2A		B11-1612-13	COLOR FILTER	Y4X4	
613	2A		B11-1616-13	COLOR FILTER	E1E2X2	
614	2A		B12-0490-14	INDICATOR ASSY	E3Y3E1	
614	2A		B12-0492-14	INDICATOR ASSY	E2X2	
614	2A		B12-0492-14	INDICATOR ASSY	E4Y4X4	
616	2A		B43-0336-04	BADGE		
620	2A		D39-0321-05	DAMPER		
⚠ 625	1A		E03-0508-05	AC PLUG ADAPTER	Y3Y4	
⚠ 626	1C		E30-7313-05	AC POWER CORD	Y3Y4	
⚠ 626	1C		E30-7330-05	AC POWER CORD	X4X2	
⚠ 626	1C		E30-7346-05	AC POWER CORD	E2	
⚠ 626	1C		E30-7346-05	AC POWER CORD	E3E4E1	
627	1B,2C		E35-3216-05	FLAT CABLE		
628	1C		E35-3746-05	FLAT CABLE		

L : Scandinavia **K** : USA **P** : Canada **R** : Mexico **C** : China **I** : Malaysia
Y : PX(Far East,Hawaii) **T** : England **E** : Europe **G** : Germany **V** : China(Shanghai)
Y : AAFES(Europe) **X** : Australia **Q** : Russia **H** : Korea **M** : Other Areas ⚠ indicates safety critical components.

* New Parts
Parts without **Parts No.** are not supplied.
Les articles non mentionnes dans le **Parts No.** ne sont pas fournis.
Teile ohne **Parts No.** werden nicht geliefert.

❹

Ref. No	Address	New Parts	Parts No.	Description	Destination	Remarks
637	1A,1B		F29-0134-04	INSULATING WASHER		
643	1B		G11-2416-04	CUSHION		
644	2A,2C		G11-2885-04	CUSHION		
645	1B		G11-2886-04	CUSHION		
646	2A		G11-2887-04	CUSHION		
647	1B		G11-2916-04	CUSHION		
648	1B		G11-2958-04	CUSHION		
649	1B,1C		G11-2959-04	CUSHION		
650	2B		G11-2968-04	CUSHION	E3Y3E1	
650	2B		G11-2969-04	CUSHION	E2X2	
650	2B		G11-2969-04	CUSHION	E4Y4X4	
-			J61-0307-05	WIRE BAND		
655	2C		J02-1467-03	FOOT (D=60,H=21.5)		
656	1B		J19-5915-05	UNIT HOLDER		
657	2C		J19-6002-04	UNIT HOLDER		
658	2C		J19-6069-05	UNIT HOLDER		
659	1C		J19-6312-05	UNIT HOLDER		
⚠ 671	1C		J42-0083-05	POWER CORD BUSHING		
679	2A		K27-2384-04	BUTTON KNOB	E3Y3E1	
679	2A		K27-2481-04	BUTTON KNOB	E2X2	
679	2A		K27-2481-04	BUTTON KNOB	E4Y4X4	
680	2B		K29-8432-04	KNOB	E3Y3E1	
680	2B		K29-8433-04	KNOB	E2X2	
680	2B		K29-8433-04	KNOB	E4Y4X4	
681	2B		K29-8434-13	KNOB	E2X2	
681	2B		K29-8434-13	KNOB	E4Y4X4	
681	2B		K29-8446-13	KNOB	E3Y3E1	
682	2B		K29-8435-11	KNOB	E3Y3E1	
682	2B		K29-8436-11	KNOB	E2X2	
682	2B		K29-8436-11	KNOB	E4Y4X4	
683	2B		K29-8437-14	KNOB ASSY	E3Y3E1	
683	2B		K29-8439-14	KNOB ASSY	E2X2	
683	2B		K29-8439-14	KNOB ASSY	E4Y4X4	
684	2B		K29-8444-04	KNOB	E3Y3E1	
684	2B		K29-8445-04	KNOB	E2X2	
684	2B		K29-8445-04	KNOB	E4Y4X4	
685	2B	*	L07-3286-15	POWER TRANSFORMER	E2	
⚠ 685	2B	*	L07-3286-15	POWER TRANSFORMER	E3E4E1	
⚠ 685	2B	*	L07-3287-15	POWER TRANSFORMER	X4X2	
⚠ 685	2B	*	L07-3336-05	POWER TRANSFORMER	Y3Y4	
⚠ 686	1C		L92-0542-05	FERRITE CORE	E2	
686	1C		L92-0542-05	FERRITE CORE	E3E4E1	
A			N84-2005-48	PAN HEAD TAPTITE SCREW		
G			N82-2608-48	BINDING HEAD TAPTITE SCREW		
J			N89-3008-48	BINDING HEAD TAPTITE SCREW		
M			N89-3018-48	BINDING HEAD TAPTITE SCREW		
N			N89-3010-48	BINDING HEAD TAPTITE SCREW		
P			N84-3005-48	PAN HEAD TAPTITE SCREW		
R			N84-2605-48	PAN HEAD TAPTITE SCREW	E2X2	
R			N84-2605-48	PAN HEAD TAPTITE SCREW	E4Y4X4	
690	1A		T90-0893-05	LOOP ANTENNA		
691	1A		T90-0855-05	LEAD WIRE ANTENNA		
692	2A		T99-0672-05	MAGNET		
693	1A		T29-0011-05	MICROPHONE UNIT		

L : Scandinavia **K** : USA **P** : Canada **R** : Mexico **C** : China **I** : Malaysia
Y : PX(Far East,Hawaii) **T** : England **E** : Europe **G** : Germany **V** : China(Shanghai)
Y : AAFES(Europe) **X** : Australia **Q** : Russia **H** : Korea **M** : Other Areas ⚠ indicates safety critical components.

KRF-V8090D/X9090D/VR-9560/9080

PARTS LIST

HOW TO READ THE PARTS LIST

ABBREVIATION OF MODEL AND MASS PRODUCTION'S DESTINATIONS

MODEL	***ABB.***	***Australia***	***Canada***	***Europe***	***PX/AAFES***	***USA***
		X	***P***	***E***	***Y***	***K***
KRF-V8090D	***B***	-	-	E1	-	-
KRF-V8090D-S	***S***	X2	-	E2	-	-
KRF-X9090D	***B***	-	-	E3	Y3	-
KRF-X9090D-S	***S***	X4	-	E4	Y4	-
VR-9080	***B***	-	P5	-	-	K5
VR-9080-S	***S***	-	P6	-	-	K6
VR-9560	***B***	-	P7	-	-	K7
VR-9560-S	***S***	-	P8	-	-	K8

✻ New Parts
Parts without **Parts No.** are not supplied.
Les articles non mentionnes dans le **Parts No.** ne sont pas fournis.
Teile ohne **Parts No.** werden nicht geliefert.

❺

Ref. No	Add-ress	New Parts	Parts No.	Description	Desti-nation	Re-marks
⚠ Q11 ,12			TRAIT3KNNF	TRANSISTOR		
⚠ Q13 ,14			TRAIT3KPNF	TRANSISTOR		
⚠ Q31 ,32			TRAIT3KNNF	TRANSISTOR		
⚠ Q33 ,34			TRAIT3KPNF	TRANSISTOR		
⚠ Q51 ,52			TRAIT3KNNF	TRANSISTOR		
⚠ Q53 ,54			TRAIT3KPNF	TRANSISTOR		
⚠ Q718			TRAIT3KNNF	TRANSISTOR		
⚠ Q720			TRAIT3KPNF	TRANSISTOR		
TH1	2C		DP40203SG270	THERMISTOR		
694	1C	✻	W02-4615-05	TUNER ASSY	Y3Y4	
694	1C	✻	W02-4616-05	TUNER ASSY	E1E2X2	
694	1C	✻	W02-4616-05	TUNER ASSY	E3E4X4	

L: Scandinavia	**K**: USA	**P**: Canada	**R**: Mexico	**C**: China	**I**: Malaysia
Y: PX(Far East,Hawaii)	**T**: England	**E**: Europe	**G**: Germany	**V**: China(Shanghai)	
Y: AAFES(Europe)	**X**: Australia	**Q**: Russia	**H**: Korea	**M**: Other Areas	⚠ indicates safety critical components.

KRF-V8090D/X9090D/VR-9560/9080

PARTS LIST

* New Parts
Parts without **Parts No.** are not supplied.
Les articles non mentionnes dans le **Parts No.** ne sont pas fournis.
Teile ohne **Parts No.** werden nicht geliefert.

❻

Ref. No	New Parts	Parts No.	Desti-nation
PREAMP (X08-3390-13)			
C1 ,2		CK73GB1H472K	
C3 ,4		CC73GCH1H220J	
C5 ,6		CD04BJ1E470M	
C7		CD04BJ1H100M	
C8 ,9		CC73GCH1H221J	
C11		CK73GB1H104K	
C12		CK73GB1A474K	
C13 ,14		CK73GB1H104K	
C15		CK73GB1H102K	
C16		CK73GB1H103K	
C41		CK73GB1H104K	
C42		CK73GB1H103K	
C43		CD04BJ1H2R2M	
C44 ,45		CK73GB1H104K	
C46		CD04BJ1E470M	
C47 ,48		CD04BJ1H4R7M	
C49		CD04BJ1H100M	
C50 ,51		CK73GB1H103K	
C57 ,58		CC73GSL1H471J	
C61 ,62		CC73GCH1H080D	
C63		CK73GB1H102K	
C64		CK73GB1C563K	
C65		CD04BJ1E470M	
C66		CC73GCH1H220J	
C79		CK73GB1H103K	
C80		CK73FB1E104K	
C81		CK73GB1H104K	
C82		CD04BJ1H100M	
C83 ,84		CK73GB1H104K	
C85		CD04BJ1H100M	
C87		CD04BJ0J331M	
C88		CD04BJ1H100M	
C89		CK73FB1E104K	
C90		CK73GB1H104K	
C91		CD04BJ1H100M	
C92		CK73FB1E104K	
C93		CK73GB1H104K	
C94		CD04BJ1H100M	
C95		CK73FB1C105K	
C96		CK73GB1H104K	
C97		CD04BJ1A101M	
C98		CK73FB1E104K	
C99		CK73GB1H103K	
C100		CD04BJ1C472M	
C101,102		CD04BJ1H100M	
C103-106	*	CC73GCH1H182J	
C109		CC73GCH1H101J	
C110		CK73GB1H103K	
C121,122		CD04BJ1H100M	
C123,124	*	CC73GCH1H222J	
C125,126		CC73GCH1H821J	
C129		CC73GCH1H101J	
C130		CK73GB1H103K	
C141,142		CD04BJ1H100M	
C143-146	*	CC73GCH1H182J	
C149		CC73GCH1H101J	
C150		CK73GB1H103K	
C161,162		CD04BJ1H100M	
C163	*	CC73GCH1H182J	
C164		CK73GB1H822K	
C165	*	CC73GCH1H182J	
C166		CK73GB1H822K	
C169		CC73GCH1H101J	
C170		CK73GB1H103K	
C181,182		CC73GCH1H220J	
C189		CC73GCH1H101J	
C190		CK73GB1H103K	
C191-196		CD04BJ1H4R7M	
C197		CK73GB1H102K	
C198		CC73GCH1H101J	
C261,262		CD04BJ1H100M	
C263,264		CC73GCH1H220J	
C265,266		CD04BJ1H4R7M	
C267		CC73GCH1H101J	
C268		CK73GB1H103K	
C501-528		CK73GB1H103K	
C529		CD04BJ1H100M	
C530-543		CK73GB1H103K	
C544,545		CK73GB1H104K	
C546-553		CK73GB1H103K	
C554		CK73GB1H104K	
C555		CK73GB1H103K	
C556-558		CK73GB1H102K	
C560		CK73GB1H103K	
C561,562		CC73GCH1H101J	
C563-565		CK73GB1H103K	
C567-570		CK73GB1H103K	
C571,572		CC73GCH1H080D	
C573		CK73GB1H102K	
C574		CK73GB1H103K	
C575		CC73GCH1H100D	
C601		CC73GCH1H101J	
C602		CK73GB1H821K	
C603		CC73GCH1H101J	
C604		CC73GCH1H100D	
CN4		E41-1435-05	
J1		E63-1387-05	
L1 ,2		L92-0510-05	
L3 -5		L92-0578-05	
X6		L77-2419-05	
X51	*	L77-2455-05	
CP51-66		RK74GB1J220J	
CP71-75		RK74GB1J181J	
R1 ,2		RK73GB2A101J	
⚠ R3		RK73EB2E4R7J	
R4		RK73GB2A471J	
⚠ R5 ,6		RK73EB2E4R7J	
R7 ,8		RK73GB2A750J	
R11 ,12		RK73GB2A101J	
R21		RK73GB2A183J	
R23		RK73GB2A201J	
R24 -26		RK73GB2A101J	
R27		RK73GB2A104J	
R30 ,31		RK73GB2A101J	
R32		RK73GB2A102J	
R33		RK73GB2A181J	
R41		RK73GB2A330J	
R42		RK73GB2A104J	
R43 -47		RK73GB2A101J	
R48 ,49		RK73GB2A100J	
R50		RK73GB2A181J	
R51		RK73GB2A100J	
⚠ R52		RK73EB2E4R7J	
R55 ,56		RK73GB2A471J	
R61 ,62		RK73GB2A105J	
R63		RK73GB2A221J	
⚠ R64		RK73FB2A2R2J	
R65		RK73GB2A330J	
⚠ R81		RK73EB2E2R2J	
⚠ R82 ,83		R92-1918-05	
⚠ R84		RS14KB3D680J	
⚠ R85		RS14KB3D560J	
⚠ R86		RS14KB3D2R2J	K5K6K7
⚠ R86		RS14KB3D2R2J	K8P5P6
⚠ R86		RS14KB3D2R2J	P7P8X4
⚠ R86		RS14KB3D3R3J	E3E4Y3
⚠ R86		RS14KB3D3R3J	X2
⚠ R86		RS14KB3D3R3J	Y4E1E2
⚠ R87		RS14KB3D3R3J	
⚠ R88		RS14KB3D2R2J	
R89		RK73GB2A202J	
R90 ,91		RK73GB2A103J	
R92		RK73GB2A152J	
R93		RK73GB2A102J	
R94		RK73GB2A472J	
R95		RK73GB2A473J	
R96 ,97		RK73GB2A221J	
⚠ R98		R92-1918-05	
R101,102		RK73GB2A104J	
R103,104		RK73GB2A222J	
R105,106		RK73GB2A102J	
R107,108		RK73GB2A103J	
R109,110		RK73GB2A472J	
R111,112		RK73GB2A221J	
R121,122		RK73GB2A104J	
R123,124		RK73GB2A332J	
R125,126		RK73GB2A911J	
R127,128		RK73GB2A272J	
R129,130		RK73GB2A562J	
R131,132		RK73GB2A221J	
R141,142		RK73GB2A104J	
R143,144		RK73GB2A222J	
R145,146		RK73GB2A102J	
R147,148		RK73GB2A103J	
R149,150		RK73GB2A472J	
R151,152		RK73GB2A221J	
R161,162		RK73GB2A104J	
R163		RK73GB2A222J	
R164		RK73GB2A273J	
R165		RK73GB2A102J	
R166		RK73GB2A183J	
R167,168		RK73GB2A103J	
R169		RK73GB2A472J	
R170		RK73GB2A912J	
R171,172		RK73GB2A221J	
R181,182		RK73GB2A102J	
R185-188		RK73GB2A562J	
R189,190		RK73GB2A101J	
R201-208		RK73GB2A104J	
R209-212		RK73GB2A472J	
R213,214		RK73GB2A432J	
R215,216		RK73GB2A562J	
R217,218		RK73GB2A472J	
R219,220		RK73GB2A562J	
R261-264		RK73GB2A562J	
R265,266		RK73GB2A101J	
R501,502		RK73GB2A330J	
R503-506		RK73GB2A104J	
R507-509		RK73GB2A101J	
R510		RK73GB2A104J	
R511		RK73GB2A330J	
R512		RK73GB2A101J	
R513-515		RK73GB2A104J	
R516		RK73GB2A101J	
R517		RK73GB2A220J	
R518		RK73FB2A100J	
R521		RK73GB2A472J	
R523,524		RK73GB2A472J	
R525,526		RK73GB2A220J	
R527		RK73GB2A101J	
R528-530		RK73GB2A472J	
R532-534		RK73GB2A472J	
R536		RK73GB2A103J	
R537-540		RK73GB2A472J	
R541-548		RK73GB2A100J	
R549		RK73GB2A101J	
R550		RK73GB2A100J	
R551		RK73GB2A104J	
R552		RK73GB2A102J	
R553		RK73GB2A101J	
R554		RK73GB2A201J	
R560-567		RK73GB2A472J	
R571		RK73GB2A105J	
R572		RK73GB2A101J	
R573		RK73GB2A105J	
R574		RK73GB2A103J	
R581		RK73GB2A104J	
R601,602		RK73GB2A100J	
R603,604		RK73GB2A120J	
R901,902		RK73GB2A000JK	
R903,904		RK73GB2A220J	
R907		RK73GB2A000JK	
R909-911		RK73GB2A000JK	
R912		RK73GB2A000JK	E1E2X2
R912		RK73GB2A000JK	E3E4X4
R912		RK73GB2A000JK	K5K6K7

L : Scandinavia
Y : PX(Far East,Hawaii)
Y : AAFES(Europe)
K : USA
T : England
X : Australia
P : Canada
E : Europe
Q : Russia
R : Mexico
G : Germany
H : Korea
C : China
V : China(Shanghai)
M : Other Areas
I : Malaysia

⚠ indicates safety critical components .

KRF-V8090D/X9090D/VR-9560/9080
PARTS LIST

✱ New Parts
Parts without **Parts No.** are not supplied.
Les articles non mentionnes dans le **Parts No.** ne sont pas fournis.
Teile ohne **Parts No.** werden nicht geliefert.

❼

Ref. No	New Parts	Parts No.	Destination
R912		RK73GB2A000JK	K8P5P6
R912		RK73GB2A000JK	P7P8
S1		S62-0034-05	Y3Y4
⚠ D1		D2SBA207009F01	
⚠ D2 -4		MA111	
D5		UDZS5.6B	
D6 ,7		UDZS3.9B	
⚠ D8		1SR154-400	
D9		UDZS3.9B	
D10		UDZS5.1B	
D11 ,12		DAN202U	
D13 -16		MA111	
⚠ D17		1SR154-400	
D18		MA111	Y3Y4
D41		DAP202U	
D42		DAN202U	
D51 ,52		MA111	
IC1		AK4114VQ	
IC2		AK4628-VQ	
IC6		TC7WU04FU-F	
IC10		NJM4565MD-ZB	
IC12		NJM4565MD-ZB	
IC14		NJM4565MD-ZB	
IC16		NJM4565MD-ZB	
IC18	✱	NJM5532MD-ZB	
IC19		NJM4565MD-ZB	
IC20		NJU7311AM-ZB	
⚠ IC21,22		BA033T	
⚠ IC23		BA05T	
⚠ IC24		XC6201P332PRN	
⚠ IC26		SI-3010KM	
IC50	✱	ADSST-AVR-1100	E3E4Y3
IC50	✱	ADSST-AVR-1100	K5K6P5
IC50	✱	ADSST-AVR-1100	P6Y4X4
IC50	✱	ADSST-AVR-1105	E1E2X2
IC50	✱	ADSST-AVR-1105	K7K8P7
IC50	✱	ADSST-AVR-1105	P8
IC51-53		SN74LVC573APWR	
IC54		SN74LVC245APWR	
IC55		SN74LVC2G125T3	
IC56		SN74LVC139APWR	
IC57		SN74LVC1G08DC3	
IC58		SN74LVC1G32DC3	
IC59	✱	LHF16JT2-1BEA	E1E2X2
IC59	✱	LHF16JT2-1BEA	K7K8P7
IC59	✱	LHF16JT2-1BEA	P8
IC59	✱	LHF16JT2-1BFA	E3E4Y3
IC59	✱	LHF16JT2-1BFA	K5K6P5
IC59	✱	LHF16JT2-1BFA	P6Y4X4
IC60	✱	IS61LV1024810T	
IC61		TC74VHC125FT	
IC62		TC74HCT7007AF	
IC63		SN74LVC1G32DC3	
IC64		SN74LVC1G08DC3	
Q1		2SB1218A(Q,R)	
Q2		2SD1819A(Q,R)	
Q51		2SC4081(R,S)	
A1 ,2		W02-4524-05	
A3		W02-4540-05	

AUDIO (X09-6960-11)

Ref. No	New Parts	Parts No.	Destination
C1 ,2		CC45FSL1H221J	
C3 ,4		CD04BJ1H100M	
C5 ,6		CC45FSL1H221J	
C7 ,8		CD04BJ1A101M	
C9 ,10		CC45FSL1H271J	
C11 ,12		CQ93FMG1H123J	
C13 ,14		CK45FB1H332K	
C15 ,16		CD04BJ1H4R7M	
C17 ,18		CC45FSL1H101J	
C19 -38		CC45FSL1H221J	
C39		CC45FSL1H101J	
C40		CK45FF1H103Z	E1E2E3
C40		CK45FF1H103Z	E4X2X4
C40		CK45FF1H103Z	Y3Y4
C41		CK45FF1H103Z	
C42		CK45FF1H103Z	E1E2E3
C42		CK45FF1H103Z	E4X2X4
C42		CK45FF1H103Z	Y3Y4
C44 ,45		CD04BJ1E470M	
C46 ,47		CQ93FMG1H823J	
C48 ,49		CC45FSL1H101J	
C51 -54		C91-1573-05	
C55 ,56		CQ93FMG1H272J	
C57 ,58		CD04BJ1H2R2M	
C62 ,63		CD04BJ1H3R3M	
C64 ,65		CD04BJ2A3R3M	
C66 ,67		CC45FSL1H331J	
C68		CC45FCH1H070D	
C69		CC45FCH1H080D	
C70 ,71		CQ93FMG1H222J	
C72 ,73		CC45FSL1H101J	
C74 ,75		CD04BJ1A221M	
C76 ,77		CC45FCH1H150J	
C78 ,79		CK45FB1H561K	
C84 ,85		CD04BJ1E470M	
C86 ,87		CC45FSL1H151J	
C88 ,89		CC45FSL2H470J	
C90 -93		C91-1577-05	E1E2E3
C90 -93		C91-1577-05	E4X2X4
C90 -93		C91-1577-05	Y3Y4
C90 ,91		C91-1573-05	K5K6K7
C90 ,91		C91-1573-05	K8P5P6
C90 ,91		C91-1573-05	P7P8
C94 ,95		CK45FB1H332K	
C111-114		CD04BJ1H3R3M	
C115,116		CC45FSL1H331J	
C117,118		CC45FCH1H050C	
C119,120		CQ93FMG1H222J	
C121,122		CC45FSL1H101J	
C123,124		CD04BJ1A221M	
C125,126		CC45FCH1H150J	
C127,128		CK45FB1H561K	
C133,134		CD04BJ1H220M	
C135,136		CC45FSL1H151J	
C137,138		CC45FSL2H470J	
C139-142		C91-1577-05	E1E2E3
C139-142		C91-1577-05	E4X2X4
C139-142		C91-1577-05	Y3Y4
C139,140		C91-1573-05	K5K6K7
C139,140		C91-1573-05	K8P5P6
C139,140		C91-1573-05	P7P8
C161		CD04BJ1H3R3M	
C163		CD04BJ2A3R3M	
C165		CC45FSL1H331J	
C167		CC45FCH1H060D	
C169		CQ93FMG1H222J	
C171		CC45FSL1H101J	
C173		CD04BJ1A221M	
C175		CC45FCH1H150J	
C177		CK45FB1H561K	
C183		CD04BJ1E470M	
C185		CC45FSL1H151J	
C187		CC45FSL2H470J	
C189-192		C91-1577-05	E1E2E3
C189-192		C91-1577-05	E4X2X4
C189-192		C91-1577-05	Y3Y4
C189,190		C91-1573-05	K5K6K7
C189,190		C91-1573-05	K8P5P6
C189,190		C91-1573-05	P7P8
C193		CK45FB1H332K	
C195,196		CK45FB1H332K	
C210,211		CC45FCH1H050C	
C301,302	✱	C90-5844-05	
C303		CQ93FMG1H103J	
C304		CD04BJ1A221M	
C305		CD04BJ1H101M	
C306		CD04BJ2A101M1	
C308		CD04BJ1H100M	
C309-311		CD04BJ1H220M	
C312		CD04BJ1A101M	
C315		CD04BJ2A330M	
C316		CD04BJ2A100M	
C317,318		CD04BJ2A220M	
C319,320		CC45FSL1H101J	
C323		CK45FB1H102K	
C324,325		CD04BJ1C471M	
C351-353		CC45FSL1H221J	
C354		CQ93FMG1H122J	
C355-360		CK45FF1H472Z	
C361,362		CD04BJ1H220M	
C363		CD04BJ1E470M	
C364		CD04AU1H2R2M	
C365		CD04BJ1A221M	
C366		CD04BJ1H4R7M	
C367		CD04BJ1A221M	
C368		CD04BJ1H4R7M	
C369		CD04AU1E220M	
C370		CK45FB1H102K	
C450		CK45FE2H103P	
C451-453		CK45FB2H102K	
C501,502		CC45FSL1H221J	
C503		CK45FF1H103Z	
C600		CD04BJ1E101M	
C609		CC45FCH1H100D	
C610		CD04BJ2A101M1	
C611		CD04BJ1H220M	
C722		CD04BJ1H220M	
C800,801		CD04BJ1H100M	
C802		CK45FF1H103Z	
CN4 ,5		E41-1435-05	
J3		E63-1379-05	
J5	✱	E70-1017-05	
J6	✱	E70-1018-05	
J11 ,12		E63-1380-05	
J21 ,22		E63-1380-05	
J501		E11-0993-05	
W350,351		E29-1677-14	
E501		J11-0898-05	E1E2E3
E501		J11-0898-05	E4X2X4
E501		J11-0898-05	Y3Y4
L1 -6		L39-1631-05	
R61 ,62		RS14KB3A821J	
R81 -84		RD14NB2E221J	
R85 ,86		RD14NB2E562J	
R87 ,88		RD14NB2E331J	
R93 -96		RD14NB2E470J	
R97 ,98		RD14NB2E221J	
R99 ,100		RD14NB2E330J	
R101,102		RS14KB3D4R7J	
R103,104		RS14KB3D391J	
R131-134		RD14NB2E221J	
R135,136		RD14NB2E562J	
R137,138		RD14NB2E331J	
R143-146		RD14NB2E470J	
R147,148		RD14NB2E221J	
R149,150		RD14NB2E330J	
R151,152		RS14KB3D4R7J	
R181		RD14NB2E221J	
R183		RD14NB2E221J	
R185		RD14NB2E562J	
R187		RD14NB2E331J	
R193		RD14NB2E470J	
R195		RD14NB2E470J	
R197,198		RD14NB2E221J	
R199,200		RD14NB2E330J	
R201,202		RS14KB3D4R7J	
⚠ R303		RD14NB2E561J	
R304		RS14KB3A822J	
⚠ R306		RD14NB2E101J	
⚠ R307		RD14NB2E822J	
R310		RS14KB3A390J	
R311		RS14KB3A680J	
R314		RS14KB3A681J	

L : Scandinavia
Y : PX(Far East,Hawaii)
Y : AAFES(Europe)
K : USA
T : England
X : Australia
P : Canada
E : Europe
Q : Russia
R : Mexico
G : Germany
H : Korea
C : China
V : China(Shanghai)
M : Other Areas
I : Malaysia

⚠ indicates safety critical components.

KRF-V8090D/X9090D/VR-9560/9080

PARTS LIST

* New Parts
Parts without **Parts No.** are not supplied.
Les articles non mentionnes dans le **Parts No.** ne sont pas fournis.
Teile ohne **Parts No.** werden nicht geliefert.

❽

Ref. No	New Parts	Parts No.	Destination
R317		RS14KB3D152J	
R318		RS14KB3D222J	
⚠ R321,322		RD14NB2E1R0J	
⚠ R325,326		RD14NB2E472J	
R331-333		RS14KB3D182J	
R342		RS14KB3A100J	
R343		RS14KB3A470J	
R454		RS14KB3A391J	
R476		RD14NB2E561J	
R627		RD14NB2E472J	
R733		RD14NB2E470J	
R735		RD14NB2E470J	
VR1 -6		R32-0118-05	
K2 -5		S76-0098-05	
D1 -5		1SS133	
D6		1SS133	E1E2E3
D6		1SS133	E4X2X4
D6		1SS133	Y3Y4
D7		MTZJ5.1(B)	E1E2E3
D7		MTZJ5.1(B)	E4X2X4
D7		MTZJ5.1(B)	Y3Y4
D8		MTZJ3.9(B)	E1E2E3
D8		MTZJ3.9(B)	E4X2X4
D8		MTZJ3.9(B)	Y3Y4
⚠ D12		D5SBA20-7000	
⚠ D14 ,15		S5688B	
D16		1SS133	
D17		MTZJ16(B)	
D18		MTZJ15(B)	
D19		MTZJ16(B)	
D20		MTZJ6.2(B)	
D21		MTZJ6.8(B)	
D22		MTZJ5.1(B)	
D23		MTZJ13(B)	X2
D23		MTZJ13(B)	Y3Y4X4
D23		MTZJ15(B)	K5K6K7
D23		MTZJ15(B)	K8P5P6
D23		MTZJ15(B)	P7P8
D23		MTZJ7.5(B)	E2
D23		MTZJ7.5(B)	E3E4E1
D24		MTZJ7.5(B)	X2
D24		MTZJ7.5(B)	Y3Y4X4
D24		MTZJ8.2(B)	E2
D24		MTZJ8.2(B)	E3E4E1
D24		MTZJ8.2(B)	K5K6K7
D24		MTZJ8.2(B)	K8P5P6
D24		MTZJ8.2(B)	P7P8
D25		MTZJ30(B)	
D26		MTZJ3.9(B)	E2
D26		MTZJ3.9(B)	E3E4E1
D27		1SS244	
D28 ,29		1SS133	
D32 -35		1SS133	
D51 ,52		1SS244	
D53 ,54		1SS133	
D55 ,56		1SS244	
D57 ,58		1SS133	
D59 ,60		1SS244	
D61 ,62		1SS133	
D63		MTZJ3.9(B)	
D64		1SS133	
D65		MTZJ3.9(B)	
D66		1SS133	
D67		MTZJ3.9(B)	
D68		1SS133	
D69		MTZJ3.9(B)	
D602-604		1SS133	
D608		MTZJ30(B)	
D609		MTZJ20(B)	
D800,801		MTZJ5.6(B)	
IC1		NJM4580L-ZB	
IC2		M61516FP	K5K6K7
IC2		M61516FP	K8P5P6
IC2		M61516FP	P7P8
IC2		M61516FP-RF0G	E1E2E3
IC2		M61516FP-RF0G	E4X2X4
IC2		M61516FP-RF0G	Y3Y4
IC800	*	CD4052BE	
Q1 -4		2SA992(F,E)	
Q5 ,6		2SA1123(R,S)	
Q7 -10		2SC2631(R,S)	
Q21 -24		2SA992(F,E)	
Q25 ,26		2SA1123(R,S)	
Q27 -30		2SC2631(R,S)	
Q41		2SA992(F,E)	
Q43		2SA992(F,E)	
Q45		2SA1123(R,S)	
Q47		2SC2631(R,S)	
Q49		2SC2631(R,S)	
Q302		DTC113ZSA	
⚠ Q303		2SC3940A(R,S)	
⚠ Q304		2SB1640	
Q305		DTC143ZSA	
⚠ Q306		2SB1640	
⚠ Q307		2SD2525	
Q308		2SA992(F,E)	
Q309-312	*	KTC3200-P	
Q313		DTC143ZSA	E2
Q313		DTC143ZSA	E3E4E1
Q331-335		2SC2878(B)-F	
Q353-358		2SC1845(F,E)	
Q359		2SA992(F,E)	
Q360,361		2SC1845(F,E)	
Q362		2SA992(F,E)	
Q363,364		2SC1845(F,E)	
Q365		2SA992(F,E)	
Q602-604		2SC1845(F,E)	
Q605,606		2SC2878(B)-F	
Q607		2SA992(F,E)	
⚠ Q610		2SD2012	
Q611	*	KTC3199-P(Y,G	E1E2E3
Q611	*	KTC3199-P(Y,G	E4X2X4
Q611	*	KTC3199-P(Y,G	Y3Y4
Q612	*	KTA1267-P(Y,G	E1E2E3
Q612	*	KTA1267-P(Y,G	E4X2X4
Q612	*	KTA1267-P(Y,G	Y3Y4

SUB (X13-7960-13)

Ref. No	New Parts	Parts No.	Destination
C101-106		CC45FCH1H100D	
C107,108		CC45FSL1H820J	
C109		CC45FCH1H100D	
C110-115		CD04BJ1V330M	
C119-124		CK45FF1H103Z	
C128-130		CC45FCH1H100D	
C131-133		CD04BJ1V330M	
C134-136		CK45FF1H103Z	
C137		CD04BJ1E470M	
C138-140		CQ93FMG1H104J	
C141		CC45FCH1H100D	
C142		CD04BJ1H100M	
C146		CD04BJ1H100M	
C147		CD04BJ1E470M	
C148		CQ93FMG1H104J	
C150		CQ93FMG1H104J	
C151,152		CD04BJ1H4R7M	
C153,154		CD04BJ1E470M	
C155,156		CC45FSL1H820J	
C157,158		CD04BJ1H220M	
C159		CC73GCH1H050C	
C161		CC73GCH1H050C	
C169		CK73GB1H331K	
C180,181		CC73GCH1H050C	
C201		CD04BJ1H100M	K5K6P5
C201		CD04BJ1H100M	P6
C202		CK45FF1H103Z	K5K6P5
C202		CK45FF1H103Z	P6
C203		CQ93FMG1H683J	K5K6P5
C203		CQ93FMG1H683J	P6
C205,206		CK45FF1H103Z	K5K6P5
C205,206		CK45FF1H103Z	P6
C207		CD04BJ1A101M	K5K6P5
C207		CD04BJ1A101M	P6
C208		CD04BJ1A221M	K5K6P5
C208		CD04BJ1A221M	P6
C209		CK45FF1H103Z	K5K6P5
C209		CK45FF1H103Z	P6
C210		CC45FSL1H221J	K5K6P5
C210		CC45FSL1H221J	P6
C211-213		CC45FSL1H101J	K5K6P5
C211-213		CC45FSL1H101J	P6
C214,215		CK45FF1H103Z	K5K6P5
C214,215		CK45FF1H103Z	P6
C216		CD04BJ1H010M	K5K6P5
C216		CD04BJ1H010M	P6
C301-309		CC45FSL1H221J	E3E4Y3
C301-309		CC45FSL1H221J	K5K6P5
C301-309		CC45FSL1H221J	P6Y4X4
C310		CC45FSL1H221J	
C311-313		CK45FB1H332K	
C315-317		CC45FSL1H101J	
C401-406		CD04BJ1H220M	
C407,408		CK45FB1H471K	
C409,410		CC73GCH1H471J	
C411,412		CK45FB1H471K	
C419		CD04BJ1E221M	
C420		CD04BJ1E101M	
C425,426		CC45FSL1H101J	
C427,428		CC73GCH1H100D	
C429,430		CC45FCH1H100D	
C431-436		CD04BJ1E470M	E3E4Y3
C431-436		CD04BJ1E470M	K5K6P5
C431-436		CD04BJ1E470M	P6Y4X4
C437,438		CD04AU1E220M	E3E4Y3
C437,438		CD04AU1E220M	K5K6P5
C437,438		CD04AU1E220M	P6Y4X4
C439		CD04BJ1E470M	E3E4Y3
C439		CD04BJ1E470M	K5K6P5
C439		CD04BJ1E470M	P6Y4X4
C440		CD04BJ1H100M	
C441,442		CD04BJ1A101M	
C443-446		CD04BJ1H220M	
C447		CD04BJ1H100M	E3E4Y3
C447		CD04BJ1H100M	K5K6P5
C447		CD04BJ1H100M	P6Y4X4
C448		CD04BJ2A3R3M	E3E4Y3
C448		CD04BJ2A3R3M	K5K6P5
C448		CD04BJ2A3R3M	P6Y4X4
C449,450		CD04BJ1H220M	
C451		CD04BJ1E221M	
C452		CD04BJ1H220M	
C453,454		CK45FB1H471K	
C455		CD04AU1E220M	
C457		CQ93FMG1H392J	
C458		CC45FCH1H100D	
C459		CC73GCH1H470J	
C460,461		CC73GCH1H101J	
C463,464		CD04BJ1E470M	E3E4Y3
C463,464		CD04BJ1E470M	K5K6P5
C463,464		CD04BJ1E470M	P6Y4X4
C468,469		CC73GCH1H070D	
C536		CK73GB1H182K	
C538		CK73GB1H102K	
C540		CD04BJ1H220M	
C544,545		CK73GB1H103K	
C600		CD04BJ1H100M	
C601-606		CC45FSL1H470J	
C607		CC45FSL1H470J	E3E4Y3
C607		CC45FSL1H470J	K5K6P5
C607		CC45FSL1H470J	P6Y4X4
C608-611		CD04BJ1E470M	
C612		CD04BJ1A101M	
C613-615		CD04BJ1V330M	
C616		CD04BJ1E470M	
C617		CK73GB1H103K	
C618		CD04BJ1H100M	

L : Scandinavia
Y : PX(Far East,Hawaii)
Y : AAFES(Europe)
K : USA
T : England
X : Australia
P : Canada
E : Europe
Q : Russia
R : Mexico
G : Germany
H : Korea
C : China
V : China(Shanghai)
M : Other Areas
I : Malaysia

⚠ indicates safety critical components.

KRF-V8090D/X9090D/VR-9560/9080

PARTS LIST

✻ New Parts
Parts without **Parts No.** are not supplied.
Les articles non mentionnes dans le **Parts No.** ne sont pas fournis.
Teile ohne **Parts No.** werden nicht geliefert.

Ref. No	New Parts	Parts No.	Destination
C619		CD04BJ1V330M	
C620		CD04BJ1H100M	
C621		CK73GB1H104K	
C622		CD04BJ1V330M	
C625		CD04BJ1H0R1M	
C626,627		CK73FB1C105K	
C651-662		CC45FSL1H470J	
C663		CK45FF1H103Z	
C664		CD04BJ1E470M	
C665		CK45FF1H103Z	
C666		CD04BJ1E470M	
C667		CK45FF1H103Z	
C668		CD04BJ1E470M	
C669		CK45FF1H103Z	
C670,671		CD04BJ1E470M	
C672		CK45FF1H103Z	
C673		CD04BJ1E470M	
C674-677		CD04BJ1H100M	
C678,679		CK73GB1H103K	
C681		CD04BJ1A471M	
C682		CK73GB1H104K	
C683		CK73GB1H103K	
C693		CC45FSL1H101J	
C694		CK73GB1H103K	K5K6K7
C694		CK73GB1H103K	K8P5P6
C694		CK73GB1H103K	P7P8
C699		CK73GB1H104K	
C702-705		CD04BJ1H3R3M	
C706,707		CC45FSL1H331J	
C708,709		CQ93FMG1H222J	
C710,711		CC45FCH1H050C	
C712		CC45FSL1H221J	
C713		CC45FSL1H101J	
C714,715		CD04BJ1A221M	
C716,717		CC45FCH1H150J	
C718,719		CC45FSL1H151J	
C720		CK45FB1H102K	
C721		CK45FB1H561K	
C722		CD04BJ1H220M	
C724,725		CC45FSL2H470J	
C728		CK45FF1H472Z	
C730		C91-1573-05	K5K6K7
C730		C91-1573-05	K8P5P6
C730		C91-1573-05	P7P8
C730		C91-1577-05	E1E2E3
C730		C91-1577-05	E4X2X4
C730		C91-1577-05	Y3Y4
C732		C91-1577-05	E1E2E3
C732		C91-1577-05	E4X2X4
C732		C91-1577-05	Y3Y4
C733		CC45FSL1H101J	
C734		CK45FF1H103Z	
CN301		E41-1435-05	
J61 ,62		E63-1384-05	
J63		E63-1383-05	E3E4Y3
J63		E63-1383-05	K5K6P5
J63		E63-1383-05	P6X4Y4
J65 -67		E56-0059-05	
J101		E63-1385-05	
J102,103		E63-1386-05	
J201	✻	E11-0995-05	K5K6P5
J201	✻	E11-0995-05	P6
J202		E11-0991-05	K5K6P5
J202		E11-0991-05	P6
J302		E63-1364-05	E3E4Y3
J302		E63-1364-05	K5K6P5
J302		E63-1364-05	P6Y4X4
J303	✻	E63-1399-05	E3E4Y3
J303	✻	E63-1399-05	K5K6P5
J303	✻	E63-1399-05	P6Y4X4
J305		E63-1359-05	E1E2X2
J305		E63-1359-05	K7K8P7
J305		E63-1359-05	P8
J502	✻	E70-1016-05	
L201		L40-1011-58	K5K6P5
L201		L40-1011-58	P6
L202		L92-0017-05	K5K6P5
L202		L92-0017-05	P6
L502		L76-0018-05	K5K6K7
L502		L76-0018-05	K8P5P6
L502		L76-0018-05	P7P8
L503		L76-0019-05	E1E2E3
L503		L76-0019-05	E4X2X4
L503		L76-0019-05	Y3Y4
L504		L79-1262-05	E1E2E3
L504		L79-1262-05	E4X2X4
L504		L79-1262-05	Y3Y4
L702		L39-1631-05	
R1 -12		RK73GB2A000JK	
R70 -77		RK73GB2A000JK	
R80 -86		RK73GB2A000JK	
R87		RK73FB2B000JK	
R88 -90		RK73GB2A000JK	
R91		RK73FB2B000JK	
⚠ R124,125		RD14BB2C1R0J	
R159,160		RK73GB2A391J	
R177,178		RK73GB2A101J	
R180,181		RK73GB2A301J	
R182,183		RK73GB2A330J	
⚠ R205		RD14BB2C101J	K5K6P5
⚠ R205		RD14BB2C101J	P6
R213,214		RD14NB2E471J	K5K6P5
R213,214		RD14NB2E471J	P6
R217		RD14NB2E471J	K5K6P5
R217		RD14NB2E471J	P6
R403,404		RK73GB2A223J	
R409,410		RK73GB2A622J	E3E4Y3
R409,410		RK73GB2A622J	K5K6P5
R409,410		RK73GB2A622J	P6Y4X4
R415,416		RK73GB2A473J	
R421,422		RK73GB2A220J	
⚠ R425		RD14NB2E561J	
R426,427		RK73GB2A102J	E3E4Y3
R426,427		RK73GB2A102J	K5K6P5
R426,427		RK73GB2A102J	P6Y4X4
R428		RK73GB2A102J	
R429		RK73GB2A103J	
R430,431		RK73GB2A103J	E3E4Y3
R430,431		RK73GB2A103J	K5K6P5
R430,431		RK73GB2A103J	P6Y4X4
R432		RK73GB2A102J	E3E4Y3
R432		RK73GB2A102J	K5K6P5
R432		RK73GB2A102J	P6Y4X4
⚠ R434		RD14NB2E150J	
R443,444		RK73GB2A183J	
⚠ R450		RD14NB2E561J	E3E4Y3
⚠ R450		RD14NB2E561J	K5K6P5
⚠ R450		RD14NB2E561J	P6Y4X4
⚠ R451		RD14NB2E102J	E3E4Y3
⚠ R451		RD14NB2E102J	K5K6P5
⚠ R451		RD14NB2E102J	P6Y4X4
⚠ R452		RD14NB2E150J	
R456		RK73GB2A473J	
R466,467		RK73GB2A100J	
R468		RK73GB2A181J	
R469		RK73GB2A161J	
R529		RK73GB2A103J	
R530		RK73GB2A223J	
R532		RK73GB2A332J	
R534		RK73GB2A562J	
R536		RK73GB2A103J	
R539		RK73GB2A223J	
R540		RK73GB2A103J	
R542		RK73GB2A104J	
R545		RK73GB2A101J	
R546		RK73GB2A474J	
R549		RK73GB2A183J	
R550		RK73GB2A103J	
R552		RK73GB2A363J	
R554		RK73GB2A103J	
R556		RK73GB2A472J	
R561,562		RK73GB2A104J	
R563,564		RK73GB2A102J	
R600		RK73GB2A101J	
R611,612		RK73GB2A101J	
R613		RK73GB2A105J	
⚠ R617		RS14KB3A150J	
R621-623		RK73GB2A104J	
⚠ R624		RS14KB3A150J	
R625-628		RK73EB2E1R0J	
R667		RK73GB2A104J	
⚠ R671		RS14KB3A150J	
⚠ R674		RS14KB3A470J	
R695		RK73GB2A101J	
R699		RK73GB2A105J	
R723,724		RD14NB2E221J	
R725,726		RD14NB2E562J	
R727,728		RD14NB2E331J	
R729,730		RD14NB2E221J	
R746		RD14NB2E330J	
R748		RS14KB3D4R7J	
R752		RS14KB3D182J	
R756		RD14NB2E470J	
R758		RD14NB2E470J	
R760		RD14NB2E221J	
VR702		R32-0118-05	
K702		S76-0098-05	
D100,101		MTZJ5.6(B)	
D155-157		MTZJ7.5(B)	
D158-161		UDZS3.9B	
⚠ D201-206		1SS133	K5K6P5
⚠ D201-206		1SS133	P6
D401		MTZJ3.9(B)	
D402		MTZJ5.1(B)	E3E4Y3
D402		MTZJ5.1(B)	K5K6P5
D402		MTZJ5.1(B)	P6Y4X4
D503		DA204U	
D652		1SS133	
D655,656		MTZJ5.6(B)	
D701-704		1SS133	
D706		1SS244	
D708		1SS133	
D710		1SS133	
IC3		BU4066BC	
IC6		RC4580IP	
IC11	✻	NJM2586AM-ZB	
IC65		LA79510M	
IC66		NJM2284V	
IC68,69		NJM2575	
⚠ IC201		BA05T	K5K6P5
⚠ IC201		BA05T	P6
IC401-404		RC4580IP	
IC507		BA4560F	
IC508		BA7623F	
⚠ Q65		2SD2525	
⚠ Q66		2SB1640	
⚠ Q100		2SA954(L,K)	
⚠ Q101		2SC2003(L,K)	
Q158,159	✻	KRC103M-P	
Q201	✻	KRC103M-P	K5K6P5
Q201	✻	KRC103M-P	P6
Q202,203		2SC1740S(Q,R)	K5K6P5
Q202,203		2SC1740S(Q,R)	P6
Q204		2SA933AS(Q,R)	K5K6P5
Q204		2SA933AS(Q,R)	P6
Q301-309		2SC2878(B)-F	E3E4Y3
Q301-309		2SC2878(B)-F	K5K6P5
Q301-309		2SC2878(B)-F	P6Y4X4
Q310		2SC2878(B)-F	
Q311-319		2SC2878(B)-F	E3E4Y3
Q311-319		2SC2878(B)-F	K5K6P5
Q311-319		2SC2878(B)-F	P6Y4X4
Q320		2SC2878(B)-F	
Q401,402		DTA124EUA	E3E4Y3
Q401,402		DTA124EUA	K5K6P5
Q401,402		DTA124EUA	P6Y4X4

L : Scandinavia
Y : PX(Far East,Hawaii)
Y : AAFES(Europe)
K : USA
T : England
X : Australia
P : Canada
E : Europe
Q : Russia
R : Mexico
G : Germany
H : Korea
C : China
V : China(Shanghai)
M : Other Areas
I : Malaysia

⚠ indicates safety critical components.

KRF-V8090D/X9090D/VR-9560/9080

PARTS LIST

⑩

∗ New Parts
Parts without **Parts No.** are not supplied.
Les articles non mentionnes dans le **Parts No.** ne sont pas fournis.
Teile ohne **Parts No.** werden nicht geliefert.

	Ref. No	New Parts	Parts No.	Destination
	Q403-408		2SC2878(B)-F	E3E4Y3
	Q403-408		2SC2878(B)-F	K5K6P5
	Q403-408		2SC2878(B)-F	P6Y4X4
	Q409	∗	KRA103M-P	E3E4Y3
	Q409	∗	KRA103M-P	K5K6P5
	Q409	∗	KRA103M-P	P6Y4X4
	Q410		DTA124EUA	
	Q411,412		2SC2878(B)-F	E3E4Y3
	Q411,412		2SC2878(B)-F	K5K6P5
	Q411,412		2SC2878(B)-F	P6Y4X4
	Q501,502		2SC4213(B)-F	
	Q512		2SC4081(R,S)	
	Q701,702		2SC2878(B)-F	
	Q703-706		2SA992(F,E)	
	Q707,708		2SC2631(R,S)	
	Q709,710		2SA1123(R,S)	
	Q711,712		2SC2631(R,S)	
	Q714		2SC1845(F,E)	
	Q716	∗	KTC3200-P	

DISPLAY (X14-7900-13/X14-7980-10)

	Ref. No	New Parts	Parts No.	Destination
	D734		B30-2545-05	
	D741-745		B30-2545-05	K5K6P5
	D741-745		B30-2545-05	K7K8P7
	D741-745		B30-2545-05	P6P8X2
	D741-745		B30-2545-05	Y3Y4X4
	D741-745		B30-2651-05	E2
	D741-745		B30-2651-05	E3E4E1
	D753		B30-2651-05	
	D755		B30-2545-05	K5K6P5
	D755		B30-2545-05	K7K8P7
	D755		B30-2545-05	P6P8X2
	D755		B30-2545-05	Y3Y4X4
	D755		B30-2651-05	E2
	D755		B30-2651-05	E3E4E1
	C101		CC45FCH1H101J	
	C103		CK73GB1H103K	
	C104		CC73GCH1H101J	
	C105		CC45FCH1H101J	E2
	C105		CC45FCH1H101J	E3E4E1
	C401		CK45FE2H103P	
	C402		CD04BJ1E222M1	E1E2X2
	C402		CD04BJ1E222M1	E3E4X4
	C402		CD04BJ1E222M1	K5K6P5
	C402		CD04BJ1E222M1	K7K8P7
	C402		CD04BJ1E222M1	P6P8
	C402	∗	CD04BJ1V222M1	Y3Y4
	C403		CD04BJ1E102M1	E1E2X2
	C403		CD04BJ1E102M1	E3E4X4
	C403		CD04BJ1E102M1	K5K6P5
	C403		CD04BJ1E102M1	K7K8P7
	C403		CD04BJ1E102M1	P6P8
	C403	∗	CD04BJ1V102M1	Y3Y4
	C404-407		CK73GB1H103K	
	C408,409		CD04BJ1E470M	
	C410		CC73GCH1H680J	
	C411		CC73GCH1H820J	
	C451		CK45FF1H103Z	
	C452		CQ93FMG1H104J	K5K6P5
	C452		CQ93FMG1H104J	K7K8P7
	C452		CQ93FMG1H104J	P6P8
	C452		CQ93FMG1H393J	E2
	C452		CQ93FMG1H393J	E3E4E1
	C452		CQ93FMG1H473J	X4X2
	C452		CQ93FMG1H683J	Y3Y4
	C453		CD04BJ1C332M1	K5K6P5
	C453		CD04BJ1C332M1	K7K8P7
	C453		CD04BJ1C332M1	P6P8
	C453		CD04BJ1E332M1	E1E2E3
	C453		CD04BJ1E332M1	E4X2X4
	C453		CD04BJ1E332M1	Y3Y4
	C454		CD04BJ1H100M	
	C455		CD04BJ1A222M1	Y3Y4
	C456,457		CK45FF1H103Z	
	C458		CD04BJ1H100M	
	C459		CD04BJ1H010M	
	C501-504		CC73GCH1H101J	
	C505,506		CK73GB1H102K	
	C507,508		CC73GCH1H101J	
	C509		CC73GCH1H471J	
	C510,511		CC73GCH1H101J	
	C515		CC73GCH1H221J	
	C516		CK73FB0J106K	
	C517		CC73GCH1H221J	
	C518		CC73GCH1H561J	
	C519		CD04BJ1H101M	
	C520		CC73GCH1H220J	
	C521		CK73GB1H152K	K5K6P5
	C521		CK73GB1H152K	K7K8P7
	C521		CK73GB1H152K	P6P8
	C522,523		CK73GB1H102K	
	C524		CC73GCH1H471J	
	C536		CK73GB1H182K	
	C538		CK73GB1H102K	
	C540		CD04BJ1H220M	
	C544,545		CK73GB1H103K	
	C550		CK73GB1A105K	
	C701		CC73GCH1H221J	
	C702		CD04BJ1H101M	
	C703,704		CK73GB1H102K	
	C705		CC73GCH1H181J	
	C741		CK73EB1E105K	
	C761-766		CK73GB1H103K	
	C777		CK45FB1H102K	
	C778		CC45FCH1H101J	
	C779		CD04BJ1A101M	
	C780		CC73GCH1H270J	
	C791		CD04AT0J470M	
	C792		CD04BJ1H220M	
	C793,794		CK45FF1H103Z	
	C811		CK45FF1H103Z	E1E2X2
	C811		CK45FF1H103Z	E3E4X4
	C812,813		CC45FCH1H270J	E1E2X2
	C812,813		CC45FCH1H270J	E3E4X4
	C814		CC45FCH1H101J	E1E2X2
	C814		CC45FCH1H101J	E3E4X4
	C815		CD04BJ1E470M	E1E2X2
	C815		CD04BJ1E470M	E3E4X4
	C816		CK45FB1H561K	E1E2X2
	C816		CK45FB1H561K	E3E4X4
	C817		CK45FF1H103Z	E1E2X2
	C817		CK45FF1H103Z	E3E4X4
	C818		CC73GCH1H271J	E1E2X2
	C818		CC73GCH1H271J	E3E4X4
	C819		CD04BJ1H2R2M	E1E2X2
	C819		CD04BJ1H2R2M	E3E4X4
	C831		CK45FF1H103Z	Y3Y4
	C832		CD04BJ1H2R2M	Y3Y4
	C833		CK45FF1H103Z	Y3Y4
	C841		CD04BJ0J102M	K5K6P5
	C841		CD04BJ0J102M	K7K8P7
	C841		CD04BJ0J102M	P6P8
	C842		C90-5647-05	E1E2E3
	C842		C90-5647-05	E4X2X4
	C842		C90-5647-05	Y3Y4
	C843		CD04BJ1H010M	
	C844		CK45FF1H103Z	
	C845		CK73GB1H103K	
	C851		CD04BJ1H100M	
	C852		CC45FSL1H221J	
	C853-855		CC73GCH1H221J	
	C856,857		CK45FF1H103Z	
	C858		CD04BJ1A101M	
	C907		CK73GB1H103K	
	C908		CK45FF1H103Z	
	C909		CK73GB1H103K	Y3Y4
⚠	J2		E03-0515-05	K5K6P5
⚠	J2		E03-0515-05	K7K8P7
⚠	J2		E03-0515-05	P6P8
⚠	J2		E03-0515-05	Y3Y4
⚠	J3		E03-0398-05	E2
⚠	J3		E03-0398-05	E3E4E1
⚠	J5		E03-0325-05	X4X2
	J20		E63-1388-05	
	J21		E56-0060-05	
	J64		E11-0983-05	
⚠	F1		F05-4025-05	E1E2E3
⚠	F1		F05-4025-05	E4X2X4
⚠	F1		F05-4025-05	Y3Y4
⚠	F1		F50-0078-05	K5K6P5
⚠	F1		F50-0078-05	K7K8P7
⚠	F1		F50-0078-05	P6P8
⚠	F2		F06-1022-05	E1E2E3
⚠	F2		F06-1022-05	E4X2X4
⚠	F2		F06-1022-05	Y3Y4
⚠	F2	∗	F50-0220-05	K5K6P5
⚠	F2	∗	F50-0220-05	K7K8P7
⚠	F2	∗	F50-0220-05	P6P8
⚠	F3		F05-4025-05	Y3Y4
	CN3 ,4		J13-0075-05	Y3Y4
	CN11,12		J13-0075-05	
	CN21,22		J13-0075-05	E1E2E3
	CN21,22		J13-0075-05	E4X2X4
	CN21,22		J13-0075-05	K7K8P7
	CN21,22		J13-0075-05	P8
	CN21,22		J13-0075-05	Y3Y4
	E701		J11-0899-05	
	E702,703		J11-0898-05	
	L500		L92-0017-05	K5K6P5
	L500		L92-0017-05	K7K8P7
	L500		L92-0017-05	P6P8
⚠	T1		L07-2758-05	X4X2
⚠	T1		L07-2761-05	E2
⚠	T1		L07-2761-05	E3E4E1
⚠	T1		L07-2805-05	Y3Y4
⚠	T1		L07-2809-05	K5K6P5
⚠	T1		L07-2809-05	K7K8P7
⚠	T1		L07-2809-05	P6P8
	X701		L78-0725-05	
	X811		L77-2002-05	E1E2X2
	X811		L77-2002-05	E3E4X4
	R1 ,2		RK73GB2A000JK	
	R11 ,12		RK73EB2E000JK	
	R51		RK73GB2A000JK	
	R120		RK73GB2A102J	
⚠	R410		RS14KB3D181J	
⚠	R453		RD14NB2E1R0J	
⚠	R454		RD14NB2E150J	Y3Y4
⚠	R454		RD14NB2E270J	E1E2X2
⚠	R454		RD14NB2E270J	E3E4X4
⚠	R454		RD14NB2E270J	K5K6P5
⚠	R454		RD14NB2E270J	K7K8P7
⚠	R454		RD14NB2E270J	P6P8
⚠	R457		R92-1844-05	K5K6P5
⚠	R457		R92-1844-05	K7K8P7
⚠	R457		R92-1844-05	P6P8
⚠	R458		RD14NB2E120J	Y3Y4
	R501,502		RK73GB2A101J	
	R503,504		RK73GB2A104J	
	R505		RK73GB2A750J	
	R506		RK73GB2A101J	
	R507,508		RK73GB2A750J	
	R509,510		RK73GB2A101J	
	R514		RK73GB2A222J	
	R515		RK73GB2A102J	
	R516		RK73GB2A473J	
	R517		RK73GB2A563J	
	R518		RK73GB2A391J	
	R521		RK73GB2A100J	K5K6P5
	R521		RK73GB2A100J	K7K8P7
	R521		RK73GB2A100J	P6P8
	R530		RK73GB2A1R0J	
	R531,532		RK73GB2A102J	
	R533		RK73GB2A103J	
	R534		RK73GB2A223J	
	R535		RK73GB2A562J	

L : Scandinavia
Y : PX(Far East,Hawaii)
Y : AAFES(Europe)
K : USA
T : England
X : Australia
P : Canada
E : Europe
Q : Russia
R : Mexico
G : Germany
H : Korea
C : China
V : China(Shanghai)
M : Other Areas
I : Malaysia

⚠ indicates safety critical components.

PARTS LIST

⑪

* New Parts
Parts without **Parts No.** are not supplied.
Les articles non mentionnes dans le **Parts No.** ne sont pas fournis.
Teile ohne **Parts No.** werden nicht geliefert.

Ref. No	New Parts	Parts No.	Destination
R536,537		RK73GB2A103J	
R538		RK73GB2A223J	
R539		RK73GB2A104J	
R540		RK73GB2A101J	
R541		RK73GB2A474J	
R542		RK73GB2A183J	
R543,544		RK73GB2A103J	
R545		RK73GB2A222J	
R776		RD14NB2E100J	
R779		RK73GB2A333J	
R780		RD14NB2E100J	
R782		RK73GB2A303J	
R801,802		RK73GB2A331J	
R803		RK73GB2A104J	
R805		RK73GB2A104J	
R807,808		RK73GB2A103J	
R834		RD14NB2E332J	Y3Y4
R847		RK73GB2A101J	
R894		RK73GB2A101J	
R896-898		RK73GB2A101J	
R910,911		RK73GB2A104J	
R915		RK73GB2A101J	
R922-924		RK73GB2A101J	
R926		RK73GB2A101J	
R935		RK73GB2A101J	
R938,939		RK73GB2A101J	
R941-945		RK73GB2A101J	
R951,952		RK73GB2A104J	
R954		RK73GB2A104J	
R955,956		RK73GB2A101J	
R967-969		RK73GB2A104J	
R970		RK73GB2A153J	
R971,972		RK73GB2A104J	
R974,975		RK73GB2A104J	
⚠ R977		RK73GB2A123J	Y3Y4
⚠ R977		RK73GB2A273J	E1E2X2
⚠ R977		RK73GB2A273J	E3E4X4
R993		RK73GB2A101J	
R997		RD14NB2E1R0J	
R999		RK73GB2A472J	
⚠ K451		S76-0107-05	K5K6P5
⚠ K451		S76-0107-05	K7K8P7
⚠ K451		S76-0107-05	P6P8
⚠ K451		S76-0110-05	E1E2E3
⚠ K451		S76-0110-05	E4X2X4
⚠ K451		S76-0110-05	Y3Y4
⚠ S1		S62-0001-05	Y3Y4
⚠ S2		S68-0142-05	E1E2E3
⚠ S2		S68-0142-05	E4X2X4
⚠ S2		S68-0142-05	Y3Y4
S701-708		S70-0086-05	
S716-725		S70-0086-05	
S731-733		S70-0086-05	
S761,762		T99-0696-05	
S763		T99-0664-05	
⚠ D401		D2SBA207009F01	
D451,452		1SS133	
⚠ D453		S1ZB20(7101)	
D454		1SS133	
D455		RB721Q	
D500,501	*	1SS302-F	
D503,504		1SS133	
D505	*	1SS302-F	
D776		MTZJ5.1(B)	
⚠ D791		1SS133	
D801-806		1SS133	
D831		1SS133	Y3Y4
⚠ D841		RB721Q	
D842		1SS133	
⚠ D843		RB721Q	
D844		1SS133	
D846		1SS133	
D961-964		1SS133	
ED78		HNA-16MM55T	
⚠ IC45		BA05T	
IC74		BU2090	
IC78		LC75711NED	
⚠ IC79	*	XC6202P502PRN	
IC81		BU1924F	E1E2X2
IC81		BU1924F	E3E4X4
IC83		S-80840CNY-GZ	Y3Y4
IC84		S-80840CNY-GZ	
IC90	*	MN101C49HYF	E3E4Y3
IC90	*	MN101C49HYF	K5K6P5
IC90	*	MN101C49HYF	K7K8P7
IC90	*	MN101C49HYF	P6P8
IC90	*	MN101C49HYF	Y4X4
IC90	*	MN101C49HYH	E1E2X2
⚠ IC401		KIA7812API-UP	
⚠ IC402		KIA7912API-UP	
IC501,502		BA4560F	
Q451		2SC1740S(Q,R)	
Q512		2SC4081(R,S)	
Q731		DTC113ZSA	
Q776		2SC1740S(Q,R)	
Q777,778		DTC124ESA	
Q841		2SC1740S(Q,R)	
Q842		2SA933AS(Q,R)	
Q843		DTC113ZSA	
⚠ TH1		MF-R090-99	
A791		W02-4599-05	E1E2E3
A791		W02-4599-05	E4X2X4
A791		W02-4599-05	Y3Y4

Ref. No	New Parts	Parts No.	Destination

L : Scandinavia
Y : PX(Far East,Hawaii)
Y : AAFES(Europe)
K : USA
T : England
X : Australia
P : Canada
E : Europe
Q : Russia
R : Mexico
G : Germany
H : Korea
C : China
V : China(Shanghai)
M : Other Areas
I : Malaysia

⚠ indicates safety critical components.

KRF-V8090D/X9090D/VR-9560/9080

SPECIFICATIONS

AUDIO section

For VR-9080

Rated power output during STEREO operation

> 100 watts per channel minimum RMS, both channels driven, at 8 Ω from 20 Hz to 20 kHz with no more than 0.09% total harmonic distortion. (FTC)

Effective power output during SURROUND operation
  FRONT (20 ~ 20 kHz, 0.09 % T.H.D., at 8 Ω one channel driven) ...... 100 W + 100 W
  CENTER (20 ~ 20 kHz, 0.09 % T.H.D., at 8 Ω one channel driven) ...... 100 W
  SURROUND (20 ~ 20 kHz, 0.7 % T.H.D., at 8 Ω one channel driven) ...... 100 W + 100 W
  SURROUND BACK (20 ~ 20 kHz, 0.7 % T.H.D., at 8 Ω one channel driven) ...... 100 W + 100 W

For KRF-X9090D

Rated power output during STEREO operation

> 100 watts per channel minimum RMS, both channels driven, at 8 Ω from 20 Hz to 20 kHz with no more than 0.09% total harmonic distortion. (FTC)

  IEC (20 Hz ~ 20 kHz, 0.09% T.H.D., at 8 Ω) ...... 100 W + 100 W
  DIN (1 kHz at 8 Ω) ...... 120 W + 120 W
Effective power output during STEREO operation
  (1 kHz, 10% T.H.D., at 8 Ω) ...... 130 W + 130 W
Effective power output during SURROUND operation
  FRONT
  (20 Hz ~ 20 kHz, 0.09 % T.H.D., at 8 Ω one channel driven) ...... 100 W + 100 W
  (1 kHz, 0.7 % T.H.D., at 8 Ω one channel driven) .. 120 W + 120 W
  (1 kHz, 10 % T.H.D., at 8 Ω one channel driven) ... 130 W + 130 W
  CENTER
  (20 Hz ~ 20 kHz, 0.09 % T.H.D., at 8 Ω one channel driven) ..... 100 W
  (1 kHz, 0.7 % T.H.D., at 8 Ω one channel driven) ...... 120 W
  (1 kHz, 10 % T.H.D., at 8 Ω one channel driven) ...... 130 W
  SURROUND
  (20 Hz ~ 20 kHz, 0.7 % T.H.D., at 8 Ω one channel driven) ...... 100 W + 100 W
  (1 kHz, 0.7 % T.H.D., at 8 Ω one channel driven) .. 120 W + 120 W
  (1 kHz, 10 % T.H.D., at 8 Ω one channel driven) ... 130 W + 130 W
  SURROUND BACK
  (20 Hz ~ 20 kHz, 0.7 % T.H.D., at 8 Ω one channel driven) ...... 100 W + 100 W
  (1 kHz, 0.7 % T.H.D., at 8 Ω one channel driven) .. 120 W + 120 W
  (1 kHz, 10 % T.H.D., at 8 Ω one channel driven) ... 130 W + 130 W

common

Total harmonic distortion ...... 0.009 % (1 kHz, 50 W, 8 Ω)
Frequency response
  CD/DVD ...... 10 Hz ~ 100 kHz, +0 dB ~ –3.0 dB
PHONO 'RIAA' response ...... 40 Hz ~ 20 kHz, +1.5 dB ~ –3.0 dB
Maximum input level
  PHONO (MM) ...... 40 mV, 1 % T.H.D., at 1 kHz
Signal to noise ratio (IHF'66)
  PHONO (MM) ...... 75 dB
  CD/DVD ...... 95 dB
Input sensitivity / impedance
  PHONO (MM) ...... 4 mV / 47 kΩ
  CD/DVD, MD/TAPE, AV AUX, VIDEO 1, VIDEO 2, VIDEO 3, DVD/6CH ...... 300 mV / 47 kΩ
Output level / impedance
  REC OUT (MD/TAPE) ...... 300 mV / 1 kΩ
  PRE OUT (FRONT) ...... 1 V / 500 Ω
  PRE OUT (CENTER) ...... 1 V / 500 Ω
  PRE OUT (SURROUND) ...... 1 V / 500 Ω
  PRE OUT (SURROUND BACK) ...... 1 V / 500 Ω
  PRE OUT (SUBWOOFER) ...... 1 V / 500 Ω
Tone control
  BASS ...... ±10 dB (at 100 Hz)
  TREBLE ...... ±10 dB (at 10 kHz)
Loudness control
  VOLUME at –30 dB level ...... +6 dB (100 Hz)

DIGITAL AUDIO section

Sampling frequency ...... 32 kHz, 44.1 kHz, 48 kHz, 96 kHz
Input level / impedance / wave length
  Optical ...... –15 dBm ~ –24 dBm, 660 nm ±30 nm
  Coaxial ...... 0.5 Vp-p / 75 Ω
Output level / impedance / wave length
  Optical ...... –21 dBm ~ –15 dBm, 660 nm ±30 nm

VIDEO section

VIDEO inputs / outputs
  VIDEO (composite) ...... 1 Vp-p / 75 Ω
S VIDEO inputs /outputs
  S VIDEO (luminance signal) ...... 1 Vp-p / 75 Ω
  S VIDEO (chrominance signal) ...... 0.286 Vp-p / 75 Ω
COMPONENT VIDEO inputs /outputs
  COMPONENT VIDEO (luminance signal) ...... 1 Vp-p / 75 Ω
  COMPONENT VIDEO (CB/CR-signal)
    VR-9080 ...... 0.64 Vp-p / 75 Ω
    KRF-X9090D ...... 0.7 Vp-p / 75 Ω

FM tuner section

Tuning frequency range ...... 87.5 MHz ~ 108.0 MHz
Usable sensitivity (MONO)
  VR-9080 ...... 1.3 µV (75 Ω)/ 13.2 dBf (75 kHz dev, SINAD 30 dB)
  KRF-X9090D ...... 1.6 µV (75 Ω)/ 15.2 dBf (75 kHz dev, SINAD 30 dB)
50 dB quieting sensitivity
  STEREO ...... 28 µV (75 Ω)/ 40.2 dBf (75 kHz dev)
Total harmonic distortion
  MONO (1 kHz, 75 kHz dev) ...... 0.5% (65 dBf input)
  STEREO (1 kHz, 67.5 +67.5 kHz dev) ...... 0.7% (65 dBf input)
Signal to noise ratio
  MONO (1 kHz, 75 kHz dev) ...... 75 dB (65 dBf input)
  STEREO (1 kHz, 67.5 + 67.5 kHz dev) ...... 68 dB (65 dBf input)
Stereo separation (1 kHz) ...... 40 dB
Selectivity (±400 kHz) VR-9080 ...... 70 dB
  KRF-X9090D ...... 50 dB
Frequency response (30 Hz ~ 15 kHz) ...... +0.5 dB, –3.0 dB

AM tuner section

Tuning frequency range
  10 kHz step (VR-9080) ...... 530 kHz ~ 1,700 kHz
  10 kHz step (KRF-X9090D) ...... 530 kHz ~ 1,610 kHz
  9 kHz step (KRF-X9090D) ...... 531 kHz ~ 1,602 kHz
Usable sensitivity (30% mod, S/N 20 dB) ...... 16 µV / (600 µV/m)
Signal to noise ratio (30% mod, 400 Hz)
  ...... 50 dB (60 dBµV EMF input)

GENERAL

Power consumption VR-9080 ...... 3.4 A
  KRF-X9090D ...... 300 W
Standby Power consumption ...... less than 2.0 W
AC outlet (SWITCHED)
  VR-9080 ...... total 150 W, 1.25 A max.
  KRF-X9090D ...... total 90 W max.
Dimensions ...... W : 440 mm (17-5/16")
  H : 166 mm (6-9/16")
  D : 396 mm (15-9/16")
Weight (Net) ...... 12.1 kg (26.7 lb)

Notes

1. KENWOOD follows a policy of continuous advancements in development. For this reason specifications may be changed without notice.
2. The full performance may not be exhibited in an extremely cold location (under a water-freezing temperature).